KINESIOLOGY (KIN)

KIN 101 Beginning Volleyball 1

Development of fundamental skills, strategic elements, and knowledge of volleyball with opportunity for team play.

KIN 104 Beginning Basketball 1

Development of fundamental skills, strategical elements, and knowledge of basketball.

KIN 106 Beginning Soccer 1

Development of fundamental skill, strategies, and knowledge of soccer.

KIN 110 Ultimate 1

Development of fundamental skills, strategic elements, and knowledge of ultimate (ultimate Frisbee) with opportunity for team play.

KIN 115 Disc Golf 1

Development of fundamental skills, tactics and strategy, and knowledge of Disc Golf, with opportunity for competitive play.

KIN 130 Weight Training 1

Weight training with emphasis on principles, techniques, and development of individualized programs. **Notes:** May be repeated once for credit.

KIN 131 Fitness Walking and Jogging 1

Designed for the beginner level student desiring to improve cardiorespiratory endurance through a graduated program from fitness walking through jogging. This course is not designed for already accomplished runners.

KIN 135 Fitness Running 1

Designed for the recreational runner striving to improve cardiorespiratory endurance, running mechanics, and program development knowledge. This course is designed for students who have a strong background in distance running (at least 5k).

KIN 140 Flag Football 1

Development of fundamental skills, tactics and strategy, and knowledge of flag football, with opportunity for competitive play.

KIN 150 Swimming for Non-Swimmers 1

Designed for students with a fear of the water who cannot swim.

KIN 151 Beginning Swimming 1

Development of fundamental swimming and safety skills; designed for students with little or no knowledge of strokes and limited deep water experience.

KIN 161 Yoga 1

All-level yoga class that focuses on anatomy, breathing and foundational yoga poses. Historical and current yoga philosophies will also be covered. **Notes:** May be repeated once for credit.

KIN 171 Beginning Badminton 1

Development of fundamental skills, strategic elements, and knowledge of badminton with opportunity for match play.

KIN 172 Beginning Self-Defense 1

Development of fundamental skills, strategic elements, and knowledge of non-weapon defense, including techniques from karate and judo.

KIN 175 Beginning Tennis 1

Development of fundamental skills, strategic elements, and knowledge of tennis with opportunity for match play in singles and doubles.

KIN 180 Rock Climbing 1

Development of fundamental rock climbing skills including knot tying, belaying, anchor building, and climbing and bouldering technique.

KIN 201 Intermediate Volleyball 1

Extension and refinement of beginning level skills, strategies, and knowledge of volleyball. Emphasis on tactical elements of team play.

KIN 203 Fitness Swim 1

Emphasis on stroke efficiency and lap swimming for conditioning. Principles of conditioning, assessment and periodization are applied to swimming. Emphasis on improvement and maintenance of personal fitness.

KIN 204 Intermediate Basketball 1

Extension and refinement of beginning level skills, strategies and knowledge of basketball. Emphasis on tactical elements of team play.

KIN 206 Intermediate Soccer 1

Extension and refinement of beginning level skills, strategies and knowledge of soccer. Emphasis on tactical elements of team play.

KIN 214 Sports Performance: Racquet Sports 1

Skill development and analysis of racquet skills. Learning and application of physical education content in a developmental model.

KIN 217 Introduction to the Teaching of Physical Education 3

Nature of teaching physical education; emphasis on its relationship to total educational experience. First-hand experience working with learners of diverse backgrounds and ability, grades K through 12, in varied settings.

KIN 220 Lifetime Wellness 3

Evidence-based approach to understanding and applying scientific principles of wellness, fitness, and lifestyle management. Includes a personal wellness and/or fitness assessment and developing a plan for immediate and long-term improvement and maintenance. **MAC:** MAC Health and Wellness

KIN 230 Psychological Skills for Optimal Performance 3

Overview of sport psychology principles applied to sport and exercise activities. Includes experience in psychological skills training.

KIN 231 Recreational Games 2

Analysis of the nature and categorization of a selection of recreational games across the lifespan, with emphasis on skill development and tactical decision-making.

KIN 250 Introduction to Kinesiology 3

Survey of the discipline of kinesiology. Analysis of the nature and importance of physical activity, knowledge base of the discipline, and careers in physical activity professions.

KIN 252 Low Intermediate Swimming 1

Extension of basic swimming and safety skills; must be comfortable in deep water.

KIN 258 Lifeguard Training 3

Skills, knowledge and techniques for lifeguarding with possibility of certification in CPR for the Professional Rescuer, First Aid and Pool Lifeguarding.

Prerequisites: CPR/First Aid certification. successful performance on swimming entrance tests;

Notes: Lab fee for supplies required.

KIN 263 Basic SCUBA 1

Development of fundamental skills, knowledge, and techniques of skin and SCUBA diving. Opportunity provided for open water training and final certification.

Notes: Additional fees for equipment rental and certification. must provide own mask, fins, snorkel, and booties.

KIN 263L Skin and SCUBA Diving Lab 0

KIN 264 Advanced SCUBA 2

Extension of skills and knowledge beyond level of basic SCUBA diver, including familiarity with operation and maintenance of SCUBA equipment. Opportunities provided for specialty certifications. **Prerequisites:** KIN 263 or equivalent and permission of instructor. **Notes:** Additional fees for equipment rental, quarry use and certification. must provide own mask, fins, snorkel, and booties.

KIN 265 Strength Training and/or Conditioning 3

Lecture and/or lab course emphasizing the basic science underlying strength training and conditioning. Specific topics include program design, exercise techniques, strength, aerobic, speed and flexibility development, physical testing, and training adaptations. **Corequisites:** KIN 265L.

KIN 265L Strength Training and/or Conditioning Laboratory 0

Lecture and/or lab course emphasizing the basic science underlying strength training and conditioning. Specific topics include program design, exercise techniques, strength, aerobic, speed and flexibility development, physical testing, and training adaptations. **Corequisites:** KIN 265.

KIN 271 Intermediate Badminton 1

Extension and refinement of beginning level skills, strategies, and knowledge of badminton. Emphasis on tactical elements of match play.

KIN 272 Tae Kwon Do 1

Acquisition and development of the basic techniques and knowledge of Tae Kwon Do. Presented in the culturally correct form.

KIN 286 Foundations of Sport Coaching 3

Introduce undergraduate students to the profession of sport coaching including the nature of the profession, qualifications, skills and issues relative to coaching.

KIN 287 Coaching in Community-Based Sport Programs 3

Examination of community-based sport programs focused on the psychosocial dynamics of programs, their mission, cultural and economic representation of youth being served, staff, resources, and their influence on coaching effectiveness.

Prerequisites: Sport Coaching minor or permission of instructor.

KIN 289 Introduction to Kinesiologic Sciences 3

This introductory course will explore the fundamental scientific questions that span the science of Kinesiology. Through this course, we will weave core ideas through different sub disciplinary lenses, developing skills that will serve you throughout your academic and professional lives.

KIN 291 Clinical Human Anatomy 4

In-depth anatomical examination of the human body for students seeking clinically-applied careers in Health and Human Sciences. Includes laboratory activities.

Prerequisites: A grade of C- or better in BIO 110 or BIO 111. **Corequisites:** KIN 291L.

KIN 291L Clinical Human Anatomy Laboratory 0

In-depth anatomical examination of the human body for students seeking clinically-applied careers in Health and Human Sciences. Includes laboratory activities.

Corequisites: KIN 291.

KIN 292 Clinical Human Physiology 4

Introduction to basic concepts of human physiology at the cell, organ and systems levels with a focus on clinical applications related to physiological systems relevant to the allied health sciences. **Prerequisites:** Minimum grade of C- in BIO 110 or BIO 111. **Corequisites:** KIN 292L.

KIN 292L Clinical Human Physiology Laboratory 0

Introduction to basic concepts of human physiology at the cell, organ and systems levels with a focus on clinical applications related to physiological systems relevant to the allied health sciences. **Corequisites:** KIN 292.

KIN 302 Movement Pedagogy for Elementary School Teaching 1.5

Introduction, for elementary school teaching majors, to physical activity and movement with a concentration on classroom curriculum integration. **Prerequisites:** Junior or senior standing. Elementary Education majors.

KIN 307 Observation and Analysis of Fundamental Movement 3 Selected physical activities with special emphasis on movement observation and analysis.

KIN 330 Critical Analyses for a Physically Active Society 3

Analyses and critical perspectives on cultural events, resources, and moments affecting modern physical activity engagement in the U.S. and globally.

Prerequisites: Junior standing.

KIN 340 Healthful Living Pedagogy for Elementary School Teaching 3

Introduction to teaching physical education in grades K-6. Designed for preservice classroom and physical education teachers. Student will work in field experiences.

Prerequisites: Junior or senior PHHT or Elementary Education major. or MA in Teaching students only;

Notes: Professional liability insurance required.

KIN 342 Teaching Motor Skills to Preschool Children 3

Strategies and techniques to enhance motor skill development of children ages 2-5 in the home, on the playground, and in the classroom. Field work with children emphasized.

Prerequisites: Junior or senior Human Development and Family Studies majors, Early Childhood Development and Education majors, Kinesiology majors, or permission of instructor.

KIN 350 History of American Sport 3

Examination of the development and significance of sport in American society.

KIN 351 History and Philosophy of Sport, Physical Activity, and Physical Education 3

Study of significant people, events, and institutions affecting the development of sport and exercise around the world. Analysis of major philosophic issues relating to sport and exercise.

KIN 352 Philosophy of Sport 3

Overview of philosophical concerns related to study of sport and sport experiences, examined with use of current sport philosophy literature.

KIN 353 Injuries and Illnesses in Physical Activity 3

Instruction in the prevention, recognition, and basic care of common injuries and illnesses that occur in a sport and exercise setting. **Prerequisites:** Grade of C or higher in KIN 250, KIN 291 (or BIO 271).

KIN 354 Curriculum and Teaching: Children's Physical Education 3

Planning and organizing for teaching and observation of movement in children's physical education. Special emphasis will be on philosophy, curriculum development, and selection of appropriate content for elementary students.

Prerequisites: Junior or senior PHHT major. Admitted to Teacher Education Program; 3.0 GPA; permission of instructor; **Notes:** Professional liability insurance required.

KIN 356 Leadership and Collaboration 3

Examination of administrative considerations in conducting physical activity and athletic programs with emphasis on leadership, collaboration, and group dynamics.

Prerequisites: Kinesiology major. 2.50 GPA;

Notes: Professional liability insurance required.

KIN 370 Assessment and Evaluation in Kinesiology 3

Overview of assessment, evaluation, and research methods in kinesiology; emphasis on applications to professional practice. **Prerequisites:** Grade of C or higher in KIN 220 and KIN 250. sophomore standing.

KIN 374 Data Science in Kinesiology 1

This class is designed to introduce the concept of data science and how it applies to Kinesiology. Students will use common software to solve mathematical problems and visualize data.

Prerequisites: Grade of C or higher in KIN 292 (or BIO 277). Grade of C or higher in KIN 291 (or BIO 271).

KIN 375 Physiology of Sport and Physical Activity 4

Provides students with understanding of factors affecting the physiological function of the body related to exercise and physical performance. Laboratory provides experiences in evaluating these physiological factors.

Prerequisites: Grade of C or higher in KIN 291 (or BIO 271) and grade of C or higher in KIN 292 (or BIO 277). or permission of instructor; **Corequisites:** KIN 375L.

KIN 375L Physiology of Sport and Physical Activity Laboratory 0

Laboratory supporting KIN 375. **Corequisites:** KIN 375.

KIN 376 Biomechanics of Sport and Physical Activity 3

Anatomical and mechanical bases of physical activity with emphasis on the analysis of sport and exercise skills.

Prerequisites: Grade of C or higher in KIN 250 and KIN 291 (or BIO 271).

KIN 379 Instructional Methods of Physical Activity 3

Designing and implementing exercise instruction techniques for individuals and groups.

Prerequisites: Grade of C or higher in KIN 250, KIN 265, and KIN 220 (or sequence of KIN 120, KIN 130, KIN 220).

KIN 381 Physical Education for Individuals with Special Needs 3

Survey of all aspects of developmental, adapted, and corrective physical education for populations of children and adults with disabilities. Weekly field experiences required.

Prerequisites: KIN 120, KIN 130, and KIN 220. Kinesiology major; Corequisites: KIN 381L.

Notes: Professional liability insurance required.

KIN 386 Motor Control and Learning 3

History of Motor Behavior, an overview of motor control, skilled performance and proficiency and how the individual learns skills through practice/and or experience.

Prerequisites: Grade of C or higher in KIN 250 and KIN 291 (or BIO 271).

KIN 387 Motor Development 3

Lifespan analysis of motor skill development as a function of chronological age.

KIN 388 Psychology of Physical Activity 3

Examination of the psychological theories and research related to physical activity with emphasis on application in sport and exercise settings.

Prerequisites: Grade of C or higher in KIN 250. PSY 121.

KIN 390 Prevention and Emergency Care of Injuries I 2

Introduction to the field of sports medicine emphasizing principles of prevention of orthopedic injuries and management of life-threatening and catastrophic injuries.

Corequisites: KIN 391.

KIN 391 Prevention and Emergency Care of Injuries II 1

Laboratory sessions and supervised field experience. Introduction to the field of sports medicine emphasizing principles of prevention of orthopedic injuries and management of life-threatening and catastrophic injuries.

Corequisites: KIN 390 or permission of instructor.

KIN 396 Dissecting Martial Arts in Contemporary China 6

Critical analysis of Chinese martial arts and its function in and conflict with contemporary China; cultural awareness of martial arts' influence in health, education, performing arts, and business decision-making in China.

Notes: May be repeated once for credit.

KIN 399 Foundations of Research in Kinesiology 3

Providing students with an examination of the practices, processes and ethics in the conduct of health- and physical activity related research. **Prerequisites:** KIN Major in good standing. minimum of sophomore standing.

KIN 419 Mentoring in Community Youth Development Programs 2

Service learning experience mentoring an elementary or middle school youth in a community youth sport program. On campus seminars required.

Notes: May be repeated for credit.

KIN 420 Physical Activity Programs for Underserved Youth 3

Overview of community-based programs designed to meet the needs of underserved youth; roles of universities and community agencies in such programs; development of leadership skills.

KIN 421 Evaluation of Physical Activity Programs in Youth Development 3

Examination of traditional and nontraditional strategies for effective youth program evaluation; attention to analysis and interpretation of data used in conducting such evaluations. **Prerequisites:** KIN 420.

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KIN 423 Detection and Correction of Pathological Movement Patterns 3

Lecture, discussion, and various classroom-oriented instruction to develop clinical knowledge and application in the analysis of movement patterns typically seen in the physically active population including walking and running gait, throwing mechanics, and other functional movement patterns.

Prerequisites: KIN 291/KIN 291L or BIO 271/BIO 271L or permission of instructor.

KIN 430 Play, Games, and Sport 3

Examination of major conceptualizations of play, games, and sport; comparisons and contrasts among the concepts.

KIN 436 Anatomical Basis of Athletic Injury 2

Focus on the link between anatomical structure, function, and athletic injury evaluation. The functional consequence of injury and rehabilitation on anatomical structures will also be addressed. **Prerequisites:** Grade of C or higher in KIN 291 or BIO 271.

KIN 441 Foundational Skills in Sports Medicine 3

Development of foundational skills and techniques for medical health professionals. Emphasis on functional palpation, sport specific movement analysis, and understanding of orthopedic pathologies. **Prerequisites:** Grade of C or higher in KIN 291 (or BIO 271).

KIN 445 Psychology of Coaching 3

Overview of sport psychology principles applied to the teaching and coaching of sport activities.

Prerequisites: PSY 121, Grade of C or higher in KIN 388.

KIN 450 Instructional Strategies for School Health Education 3

This course prepares students to teach K-12 health education. The course focuses on methods, instructional practices, assessment, and reflection on effective health education.

Prerequisites: KIN 354. Senior PHHT majors; Admitted to Teacher Education Program; 3.0 GPA;

Corequisites: KIN 454 and KIN 460.

Notes: Professional liability insurance required.

KIN 454 Curriculum and Teaching: Secondary School Physical Education 3

Planning and organizing for teaching and observation of movement in secondary school physical education. Emphasis on the analysis of the teaching process, curriculum development, and selection of appropriate content.

Prerequisites: KIN 354, KIN 375. Admitted to Teacher Education Program; Senior PHHT majors; 3.0 GPA;

Corequisites: KIN 450, KIN 460.

Notes: Professional liability insurance required.

KIN 456 Teaching Practicum II: Children's Physical Activity 2

Practicum experiences in teaching physical activity to children with special emphasis on lesson planning, management, assessment, task presentation, and content development.

Prerequisites: Admission to Community Youth Sport Development concentration.

Corequisites: Concurrent enrollment in KIN 235.

KIN 457 Teaching Practicum: Adolescents' Physical Activity 2

Practicum experiences in teaching physical activity to adolescents with special emphasis on lesson planning, management, assessment, task presentation, and content development.

Prerequisites: KIN 235. Kinesiology major with Community Youth Sport Development concentration;

Notes: Professional liability insurance required.

KIN 460 Teaching Physical Education and Health Internship 3

Supervised field experience in Physical Education and Health Teacher Education in an approved local school setting. Includes campus meetings.

Prerequisites: KIN 375, KIN 386. 3.0 GPA; Senior PHHT major; admission to the Teacher Education Program;

Corequisites: KIN 450, KIN 454.

Notes: Professional liability insurance required.

KIN 461 Student Teaching and Seminar in Physical Education 12

Block courses in professional semester for teacher education majors. Techniques of teaching physical education under supervision. Full-time teaching in schools. Weekly seminars.

Prerequisites: Program requirements leading to student teaching. Methods courses (KIN 354, KIN 379, KIN 450, KIN 454, and KIN 460) must be taken at UNCG; 3.0 GPA; PHHT major;

Notes: Professional liability insurance required. Grade: Pass/Not Pass (P/ NP); ARC FA and CPR must be current.

KIN 462 Student Teaching and Seminar in Physical Education 6

Block courses in professional semester for teacher education majors. Techniques of teaching physical education under supervision. Full-time teaching in schools. Weekly seminars.

Prerequisites: Program requirements leading to student teaching. Methods courses (KIN 235, KIN 354, KIN 453, KIN 454, KIN 455, and KIN 460) must be taken at UNCG; Admission by application only; 2.50 GPA; All other course work must be complete to enroll;

Notes: Professional liability insurance required. Grade: Pass/Not Pass (P/ NP); ARC FA and CPR must be current; Admission to Teacher Education Program is required.

KIN 465 History of the Olympic Games 3

Development of the Olympic Games movement in both the ancient world and modern era. Consideration of cultural, philosophical, political, economic, and performance perspectives.

KIN 466 Practicum in the HOPE Program 3

Practical experience working with a wide variety of individuals in the HOPE program designing and implementing exercise programs in a supervised setting. Emphasis on applying knowledge in a hands-on environment and building professional skills including: interpersonal, communication, leadership, and adaptability.

Prerequisites: Grade of C or higher in KIN 379.

Notes: Professional liability insurance required. May be repeated twice for credit.

KIN 468 Exercise Assessment, Testing, and Prescription for Fitness and Rehabilitation Professionals 3

Developing proficiency in clinical skills related to health and fitness assessments and design of individualized exercise prescriptions in fitness and rehabilitation settings. Focus on experiential learning and hands-on skills.

Prerequisites: Grade of C or higher in KIN 265, KIN 291 (or BIO 271) and KIN 292 (or BIO 277).

KIN 468L Exercise Testing and Prescription I Laboratory 0 Laboratory supporting KIN 468. Corequisites: KIN 468.

KIN 469 Exercise Testing and Prescription in Special Populations 3 Scientific principles of safe and effective exercise testing and prescription for persons with chronic disease and other medical conditions. Includes basics of electrocardiography. Prerequisites: Grade of C (2.0) or higher in KIN 468.

KIN 470 Development and Implementation of Fitness Programs 3 Preparation in planning, designing, developing, organizing, programming, implementing, directing, and evaluating fitness programs.

KIN 471 Internship Preparation in Kinesiology 3

Professional preparation, planning, and placement for supervised internship experience (KIN 496). **Prerequisites:** 2.50 overall GPA, permission of instructor.

KIN 475 Independent Study 1-3

Intensive work in area of special interest in Kinesiology. Available to qualified students on recommendation of academic advisor, instructor, and undergraduate program coordinator.

Prerequisites: Demonstrated competency for independent work and permission of academic advisor, instructor, and undergraduate program coordinator.

Notes: May be repeated for a total of up to 6 s.h.

KIN 477 Coaching Practicum in a Selected Sport 3

Opportunity for prospective coach to assume various responsibilities in coaching a selected sport under the guidance of a qualified coach. **Prerequisites:** Current First Aid/Sports Safety Certification. Upper division students seeking minor in sport coaching, or permission of instructor; **Notes:** Professional liability insurance required.

KIN 479 Exercise and Older Adults 3

Basic principles underlying exercise/aging. The delivery of exercise information and the conduct of exercise programs for older adults. **Prerequisites:** Junior standing. permission of instructor.

KIN 481 Nutrition and Physical Fitness 3

Metabolism during exercise, ergogenic aids, nutrients' effects on performance, and body composition alterations during training. Gender and age-specific needs and responses to exercise and dietary intake. **Prerequisites:** Grade of C (2.0) or better in BIO 277 and NTR 213 and NTR 413 (or equivalents). KIN 375 recommended.

KIN 493 Honors Work 3-6

Prerequisite: Permission of instructor; 3.30 GPA in the major, 12 s.h. in the major;

Notes: May be repeated for credit if the topic of study changes.

KIN 496 Kinesiology Internship 3,6

A supervised field experience in qualified agencies. Application process is required for permission to register. Course involves specific assignments, supervision, seminars on campus, and evaluation of student's performance.

Prerequisites: None.

Notes: An application process must be completed prior to registration. Course may be repeated for credit if taken for three (3) s.h.; total hours for course may not exceed six (6) s.h.

KIN 519 Mentoring in Community Youth Development Programs 2

Service learning experience mentoring an elementary or middle school youth in a community youth sport program. On campus seminars required.

Notes: May be repeated for credit.

KIN 520 Physical Activity Programs for Underserved Youth 3

Overview of community-based programs designed to meet the needs of underserved youth; roles of universities and community agencies in such programs; development of leadership skills.

KIN 521 Evaluation of Physical Activity Programs in Youth Development 3

Examination of traditional and nontraditional strategies for effective youth program evaluation; attention to analysis and interpretation of data used in conducting such evaluations.

Prerequisites: KIN 520.

KIN 536 Anatomical Basis of Athletic Injury 3

Focus on the link between anatomical structure, function, and athletic injury evaluation. The functional consequence of injury and rehabilitation on anatomical structures will also be addressed.

Prerequisites: Undergraduate anatomy and physiology.

KIN 570 Development and Implementation of Fitness Programs 3

Preparation in planning, designing, developing, organizing, programming, implementing, directing, and evaluating fitness programs.

KIN 576 Nutrition and Physical Fitness 3

Metabolism during exercise, ergogenic aids, nutrients' effects on performance, and body composition alterations during training. Gender and age-specific needs and responses to exercise and dietary intake.

KIN 579 Exercise and Older Adults 3

Basic principles underlying exercise/aging. The delivery of exercise information and the conduct of exercise programs for older adults.

KIN 601 Applying Research to Professional Practice 3

This course is designed for future practitioners in health and physical activity to gather, read, interpret, assess, and apply research to their fields.

KIN 620 Athletic Training Clinical Experience 3

Supervised field experience in an assigned athletic training clinical setting. Students are required to complete 300 clock hours under the supervision of an approved clinical instructor.

Prerequisites: Admission to the MSAT degree program. **Notes:** Must be taken four times.

KIN 622 Internship in Community Youth Sport Development Programs 6

Supervised field experience in qualified agencies. Course involves specific assignments, seminars on campus, and evaluation of student's performance.

Prerequisites: KIN 520, KIN 521.

Notes: Grade: Satisfactory/Unsatisfactory, S/U.

KIN 623 Detection and Correction on Functional Movement Patterns in the Physically Active Population 2

The course addresses the detection and correction of functional movement patterns such as gait and throwing mechanics, and principles of basic strength and conditioning.

KIN 624 Assessment and Treatment of the Lumbo-Pelvic-Hip Complex 2

This course will review the anatomy, assessment, acute treatment, and rehabilitation of injuries in physically active populations as related to the lumbo-pelvic hip complex.

KIN 630 Sport and Society: Social Inequalities 3

Survey of current theories and research in the sociological study of sport, physical activity, and exercise; focus on sport and major social institutions, social inequalities, and social change.

Prerequisites: KIN 330, introductory sociology, or permission of instructor.

KIN 633 Emergency Care Athletic Training 3

Evaluation and treatment skills for athletic injuries to the head, face, neck, heart, trunk, thorax, abdomen, and those caused by the environment. Acute first-aid considerations in life-threatening and emergent situations will also be covered in-depth.

KIN 634 Athletic Training Foundations 3

Introduction of concepts and skills related to the prevention and treatment of athletic injuries, and management of life-threatening and catastrophic injuries.

Prerequisites: Admission to MSAT degree program or permission of instructor.

KIN 636 Assessment and Treatment of the Lower Extremity 4

Recognizing, evaluating, treating, and rehabilitating various lower extremity orthopedic injuries commonly sustained in the athletic environment.

KIN 638 Assessment and Treatment of the Upper Extremity 4

Recognizing, evaluating, treating, and rehabilitating various upper extremity orthopedic injuries commonly sustained in the athletic environment.

KIN 640 Rehabilitation Techniques for Athletic Injuries 4

Awareness, understanding, and application of principles and skills pertaining to rehabilitation of injuries in physically active populations. **Prerequisites:** Admission into the MSAT degree program or permission of instructor.

Corequisites: Admission into the MSAT degree program or permission of instructor.

KIN 642 Optimizing Athletic Performance 3

Exploration of sports nutrition, ergogenic aids, and strength and conditioning principles within the context of sport injury and rehabilitation.

Prerequisites: Admission to MSAT degree program or permission of instructor.

KIN 643 Mechanical Analysis of Motor Skills 3

Mechanical principles applied to the teaching and analysis of selected sports activities; evaluation of modern bio-mechanical techniques.

KIN 644 Psychology of Sport and Exercise 3

Theories and research related to sport psychology; individual differences, motivation and social influence processes related to sport and exercise behavior.

Prerequisites: Introductory psychology or permission of instructor.

KIN 645 Exercise Psychology 3

Examination of the effects of exercise on various factors (e.g., stress, mood) and the effects of psychological variables (e.g., biofeedback, motivation) on exercise.

KIN 649 Principles of Physical Activity Behavior Change 3

This course will acquaint graduate students with the application of major theories and models used to design and guide the development of contemporary physical activity interventions.

Prerequisites: Students admitted to the Sport and Exercise Psychology and Applied Sport Psychology concentrations within the Kinesiology Department. Students from other program areas and departments may be admitted with instructor permission.

KIN 653 History of American Sport and Exercise Science 3

Study of development of sport and exercise science in the U.S. with special emphasis on the evolving institutional involvement of schools and colleges.

KIN 656 Psycho-Social Aspects of Teaching Physical Education and Sport 3

Social and psychological factors that influence instructional interactions and the perceptions of teachers, coaches, and students.

Prerequisites: Previous teaching experiences or permission of instructor.

KIN 658 Multiculturalism and Physical Education Curriculum 3

Cultures, cultural influence, race, gender and class roles, as they intersect with physical ability in physical activity, hidden curriculum issues, diverse cultures as curricular resources, culturally relevant pedagogy in PE.

KIN 659 Professional Development Seminar 0.5

Conversations about scholarship and professional issues, career and academic paths, and research relevant to sub-disciplines in kinesiology. **Notes:** May be repeated for up to 2 credit hours. Grading method is Satisfactory/Unsatisfactory (S/U).

KIN 667 Exercise Electrocardiography and Cardiopulmonary Medications 3

Electrocardiography and mechanisms/side effects of cardiopulmonary medications most likely encountered in clinical exercise settings. Particularly appropriate for students interested in cardiopulmonary rehabilitation and clinical exercise testing.

Prerequisites: KIN 375 or equivalent or permission of instructor. **Corequisites:** KIN 670 or permission of instructor.

KIN 668 Advanced Exercise Assessment 3

Exercise testing for cardiorespiratory fitness and disease diagnosis. Knowledge of ECG interpretation and cardiorespiratory pharmacology applied to clinical exercise testing. Also covers body composition and musculoskeletal fitness testing.

Prerequisites: KIN 468 or equivalent, KIN 670, or permission of instructor.

KIN 669 Advanced Exercise Prescription 3

Prescription of exercise for healthy, at-risk, and diseased individuals. Covers exercise prescription objectives for American College of Sport's Medicine's Exercise Specialist and Health Fitness certifications. **Prerequisites:** KIN 670 or permission of instructor.

KIN 670 Physiology of Exercise 3

In-depth study of the physiological basis of human physical performance with emphasis on the acute response and chronic adaptations of the body to exercise.

Prerequisites: KIN 375 or permission of instructor.

KIN 675 Applied Human Work Physiology 3

Physiological factors which influence the exercise and performance capabilities of humans.

Prerequisites: KIN 375 or equivalent, or by permission of instructor.

KIN 680 Mental Skills for Coaching Athletes 3

In-depth review of psychological principles applied to coaching sport activities, including theory and application of mental skills training and motivational techniques.

KIN 682 Working with Diverse Populations in Sport and Performance Psychology 3

Explores the systematic study of behavior, cognition, and affect in sport and performance-related settings where people of different backgrounds interact. Focus is on theories and competencies for consulting in diverse performance contexts. Additional topics include biases, prejudices, oppression, discrimination, acculturation, and their effects on physical and mental health.

KIN 683 MRI for Brain Mapping 3

Introduction to magnetic resonance imaging (MRI) methods and applications, with a specific focus on understanding how MRI is used to quantify brain structure and function in the study brain and behavior relationships.

KIN 694A Internship in Kinesiology 3-6

Supervised field experience appropriate to the student's interests and background in selected settings during the final phases of the student's curricular plan.

Prerequisites: Permission of Instructor. **Notes:** May be repeated once for credit.

KIN 694B Internship in Kinesiology 3-6

Supervised field experience appropriate to the student's interests and background in selected settings during the final phases of the student's curricular plan.

Prerequisites: Permission of Instructor. **Notes:** May be repeated once for credit.

KIN 695 Independent Study 1-3

Intensive study in an area of special interest in physical education. **Prerequisites:** Demonstrated competency for independent work and permission of departmental academic advisor and the instructor.

KIN 699 Thesis 1-6

KIN 700 Special Topics in Kinesiology 3

Advanced study in special topics from the various subspecialties within the field of kinesiology.

KIN 701 Research Topics in Kinesiology 3

Intensive examination of specific topics; critical review of current literature.

Prerequisites: Prerequisites and defined research competencies will vary according to topic.

Notes: May be repeated for credit when topic varies.

KIN 702 Research Seminar in Applied Neuromechanics 1

Exploration of the assessment of neuromechanical function of the extremities and its relationship to performance, joint instability, and injury risk.

Prerequisites: Graduate student in KIN with an applied neuromechanical focus or permission of instructor.

Notes: May be repeated for a total of 3 credit hours when topic varies. Grade: Satisfactory/Unsatisfactory (S/U).

KIN 704 Athletic Training Seminar 3

Study course for the National Athletic Trainers' Association Board of Certification (BOC) examination involving review examinations and projects on the 5 BOC practice domains for athletic training.

Prerequisites: Admission into the MSAT degree program or permission of instructor.

Corequisites: Admission into the MSAT degree program or permission of instructor.

KIN 705 Applied Rehabilitation Concepts 3

Capstone experience involving the supervision of a comprehensive orthopedic rehabilitation project and writing a final document to summarize patient outcomes.

Prerequisites: Admission into the MSAT degree program or permission of instructor.

Corequisites: Admission into the MSAT degree program or permission of instructor.

KIN 706 Online Pedagogy in Kinesiology and Related Professions 3

Online course design in Kinesiology and related professions using evidence-based best practices. Creation of online course and its modules using a collaborative, learner-centered approach to online instruction.

KIN 709 Mentored Teaching in Kinesiology 1-3

Mentored teaching experience in kinesiology developed by student and faculty mentor, beyond graduate assistantship.

Prerequisites: Permission of instructor.

Notes: May be repeated for a maximum of 6 credits. Grade: Satisfactory/ Unsatisfactory (S/U).

KIN 712 Current Research and Issues in Sport and Exercise Psychology 1

Exploration of current research and issues within sport and exercise psychology; emphasis on developing a broad understanding of sport and exercise psychology scholarship and its relationship to Kinesiology. May be repeated for a total of 3 credit hours when topic varies.

Notes: Grade: Satisfactory/Unsatisfactory (S/U).

KIN 713 Internship in Kinesiology 3-6

Supervised field experience appropriate to the student's interests and background in selected settings during the final phases of the student's curricular plan.

Prerequisites: Permission of instructor in addition to the following: cumulative GPA of 3.0 or better. completed Core Required Course(s) or Core Requirement for concentration area with grade of B or better; KIN 713A- For internships that are not in preventative or clinical settings; No additional prerequisites; KIN 713B- For internships in preventative or clinical settings; Additional prerequisite: Grade of P in KIN 471; **Notes:** 3-6 credits per term, with a maximum of 12 being allowed. Grading method is Satisfactory/Unsatisfactory (S/U).

KIN 714 Field Practicum in Kinesiology 1-6

Developing, implementing, and/or evaluating a focused set of professional activities in a field setting. Requires guidance, approval, and evaluation by one faculty member.

Notes: May be repeated for a maximum of 9 credits. Grade: Satisfactory/ Unsatisfactory (S/U).

KIN 715 Professional Ethics in Health and Human Sciences 3

A view of professional ethics in health and human sciences through the lens of Boyer's model of scholarship (discovery/integration, application, teaching/learning).

KIN 716 Action-Oriented Research in Kinesiology 3

An overview of research approaches and methods in kinesiology with an emphasis on application in professional practice. **Notes:** Registration restricted to students enrolled in the Ed.D. in Kinesiology program.

KIN 717 Qualitative Research Methods in Kinesiology 3

Research design and methods for health and human science settings including data source sampling; collection/analysis of artifact, observation, interview, focus group data; within case analysis, writing case reports.

KIN 718 Cardiovascular Aspects of Exercise Physiology 3

Effects of acute and chronic exercise on heart function and size, peripheral vasculature, hemodynamics and cardiac output. **Prerequisites:** KIN 670 or permission of instructor.

KIN 719 Muscular Aspects of Exercise Physiology 3

Effects of acute and chronic exercise on muscular mechanics, blood supply, size of muscle, fiber types, fatigue and physical performance. **Prerequisites:** KIN 670 or permission of instructor.

KIN 720 Pathophysiology and Pharmacology 3

In-depth study of the pathophysiology and pharmacologic treatment of major illnesses, injuries, and diseases observed in clinical settings. **Prerequisites:** KIN 375 and BIO 111 or equivalent or permission of instructor.

KIN 721 General Medical Conditions 3

Lecture and laboratory experiences to develop clinical skills in assessment and management of general medical situations common to athletic training.

Prerequisites: Admission to MSAT degree program or permission of instructor.

Corequisites: KIN 720.

Notes: Lab fee for supplies required.

KIN 723 Statistical Methods for Kinesiology 3

Basic statistics with applications for kinesiology.

KIN 724 Physical Activity and Health 3

Health benefits and risks of physical activity/exercise. Course content parallels the 1996 U.S. Surgeon General's report Physical Activity and Health with updated referencing.

Prerequisites: KIN 375 or equivalent or permission of instructor.

KIN 725 Management and Professional Issues in Athletic Training 3

The administration and organization of athletic training health care programs and facilities. Current issues in athletic training professional conduct and practice will also be discussed.

Prerequisites: Admission to MSAT degree program or permission of instructor.

KIN 726 Development and Implementation of Fitness Programs 3

Preparation in planning, designing, developing, organizing, programming, implementing, directing, and evaluating fitness programs.

KIN 727 Nutrition and Physical Fitness 3

Metabolism during exercise, ergogenic aids, nutrients' effects on performance, and body composition alterations during training. Gender and age-specific needs and responses to exercise and dietary intake.

KIN 728 Advanced Motor Learning and Control 3

Explores the nature and basis of skill acquisition, performance, retention, and transfer. Provides a theoretical research foundation to further understanding of motor skill acquisition and factors that influence the learning of motor skills.

KIN 729 Learning and Performance of Physical Skills 3

Application of principles of learning to the learning and performance of physical skills, including the social, emotional, and personality factors affecting skill acquisition.

Prerequisites: General and developmental psychology (9 hours), or permission of the instructor.

KIN 730 Neural Aspects of Motor Control 3

Multi-disciplinary seminar exploring theories and mechanisms of neuromuscular control of human movement.

Prerequisites: Undergraduate survey course in motor learning/control or permission of instructor.

KIN 731 Curriculum Development in Kinesiology 3

Modern principles and practices in curriculum construction and current theories of curriculum development in Kinesiology.

KIN 732 Analysis of Teaching and Learning 3

Introduction to quantitative and qualitative methods for evaluating teaching and learning including techniques of classroom observation, classroom climate analysis, and student engagement. Extends the research competencies of those interested in pedagogical assessment.

KIN 735 Program Evaluation and Evidence-Based Practice in Physical Activity Programs 3

Concepts, processes and methods, results interpretations, and issues in the evaluation of in physical activity programs/interventions; reflection and critique of different evaluation philosophies, theories, methods, and policy ramifications in program evaluation.

KIN 736 Leadership, Advocacy, and Social Justice in Kinesiology 3

Framed around questions of equity, ethics and social justice, and designed to prepare leaders to address complex problems of practice.

KIN 737 Applied Data Analysis in Kinesiology 3

Provides an overview of basic quantitative and qualitative data analysis methods that can be applied to address problems of practice.

KIN 738 Sport-based Youth Development 3

Current principles, practices, and research related to programs that promote youth development outcomes through sport participation.

KIN 739 Knowledge and Scholarship in Kinesiology 3

Defines and describes the role of scholarship in enhancing research, professional practice, and community well-being as it relates to kinesiology.

KIN 740 Psychology of Sport and Exercise 3

Theories and research related to sport psychology. Individual differences, motivation and social influence processes related to sport and exercise behavior.

Prerequisites: Introductory psychology or permission of instructor.

KIN 741 Exercise Psychology 3

Examination of the effects of exercise on various factors (e.g., stress, mood) and the effects of psychological variables (e.g., biofeedback, motivation) on exercise.

KIN 742 Mechanical Analysis of Motor Skills 3

Mechanical principles applied to the teaching and analysis of selected sports activities. Evaluation of modern bio-mechanical techniques.

KIN 743 Psychological Aspects of Sport Injury 3

Psychological factors and intervention strategies as they relate to the risk, experience, and treatment of athletic injuries from a biopsychological perspective.

Prerequisites: KIN 644, Applied Sport Psychology concentration or permission of instructor.

KIN 744 Applied Sport Psychology 3

Current research in applied sport psychology; sport-specific individual differences, motivational approaches, and interventions. **Prerequisites:** KIN 644.

KIN 745 Social Psychology and Physical Activity 3

Current theories, research methodologies and findings related to the social psychological aspects of sport and exercise behavior; emphasis on application in professional practice.

Prerequisites: Permission of instructor.

KIN 746 Practicum in Applied Sport and Exercise Psychology 1-3

Skill development and application of theory in practice in applied sport psychology through supervised work in a laboratory and/or field setting. **Prerequisites:** KIN 744 or equivalent and permission of instructor. **Notes:** May be repeated for up to 10 credit hours. no more than 6 credit hours can count toward degree requirements; lab fee required each semester; grade method is Satisfactory/Unsatisfactory (S/U).

KIN 748 Advanced Topics in Sport Exercise and Psychology 3

Advanced study in special topics within a field of sport and exercise psychology.

Notes: May be repeated for credit when topic varies for a maximum of 12 credits.

KIN 750 Seminar in Kinesiology 3

Integrative seminar focusing on major issues confronting the field of kinesiology, and applying concepts to professional practice and higher education.

Notes: Registration restricted to students enrolled in the Ed.D. in Kinesiology program.

KIN 751 Advanced Research Seminar in Kinesiology 3

Integrative seminar focusing on development, refinement, and presentation of research.

Notes: Registration restricted to students enrolled in the Ed.D. in Kinesiology program.

KIN 752 Advanced Professional Seminar in Kinesiology 3

An advanced doctoral seminar focused on developing students' professional leadership and collaborative skills, while also supporting the advancement of dissertation research.

Notes: Registration restricted to students enrolled in the Ed.D. in Kinesiology program.

KIN 753 Professional Dissertation Seminar 1-3

Develop, discuss, and prepare to defend doctoral dissertation proposal. **Prerequisites:** KIN 751 or permission of instructor.

KIN 756 Psycho-Social Aspects of Teaching Physical Education and Sport 3

Social and psychological factors that influence instructional interactions and the perceptions of teachers, coaches, and students.

Prerequisites: Previous teaching experiences or permission of instructor.

KIN 758 Multiculturalism and Physical Education Curriculum 3

Cultures, cultural influence, race, gender and class roles, as they intersect with physical ability in physical activity, hidden curriculum issues, diverse cultures as curricular resources, culturally relevant pedagogy in PE.

KIN 759 Professional Development Seminar 0.5

Conversations about scholarship and professional issues, career and academic paths, and research relevant to sub-disciplines in kinesiology. **Notes:** May be repeated for up to 3 credit hours. Grading method is Satisfactory/Unsatisfactory (S/U).

KIN 762 Program Design in Kinesiology and Related Professions 3

Methods for designing academic programs in Kinesiology and related fields. Leadership skills, strategic planning, and implementing a program are the focus of this class.

KIN 767 Exercise Electrocardiography and Cardiopulmonary Medications 3

Electrocardiography and mechanisms/side effects of cardiopulmonary medications most likely encountered in clinical exercise settings. Particularly appropriate for students interested in cardiopulmonary rehabilitation and clinical exercise testing.

Prerequisites: KIN 375 or equivalent or permission of instructor. **Corequisites:** KIN 770 or permission of instructor.

KIN 768 Advanced Exercise Assessment 3

Exercise testing for cardiorespiratory fitness and disease diagnosis. Knowledge of ECG interpretation and cardiorespiratory pharmacology applied to clinical exercise testing. Also covers body composition and musculoskeletal fitness testing.

Prerequisites: KIN 468 or equivalent, KIN 770, or permission of instructor.

KIN 769 Advanced Exercise Prescription 3

Prescription of exercise for healthy, at-risk, and diseased individuals. Covers exercise prescription objectives for American College of Sport's Medicine's Exercise Specialist and Health Fitness certifications. **Prerequisites:** KIN 770 or permission of instructor.

KIN 770 Physiology of Exercise 3

In-depth study of the physiological basis of human physical performance with emphasis on the acute response and chronic adaptations of the body to exercise.

Prerequisites: KIN 375 or permission of instructor.

KIN 775 Applied Human Work Physiology 3

Physiological factors which influence the exercise and performance capabilities of humans.

Prerequisites: KIN 375 or equivalent or permission of instructor.

KIN 778 Professional Seminar in Grant Writing 3

An advanced doctoral seminar on the grant writing process. Students will develop proposals appropriate for any agencies and foundations that fund applied research and professional programs.

Notes: Registration restricted to students enrolled in the Ed.D. in Kinesiology program.

KIN 779 Dissertation Presentation Seminar 1

A seminar focusing on students' dissertation research. Satisfactory completion requires presentation of the dissertation in an on-campus seminar; typically completed in the student's final semester. **Prerequisites:** Admission to the EdD in Kinesiology degree program.

KIN 795 Independent Doctoral Research 1-6

In-depth study of a problem in exercise and sport science. May include a synthesis/review of literature, scientific investigation, or design, implementation, or evaluation of project.

Prerequisites: Prior approval of graduate faculty member who will supervise and evaluate the project.

Notes: Grade: Satisfactory/Unsatisfactory (S/U).

KIN 798 Doctoral Seminar in Grant Writing 3

The grant writing process, including the procedures and technical strategies for developing and submitting a grant proposal for funding. **Prerequisites:** Prior approval of graduate faculty member who will supervise and evaluate the project.

Corequisites: KIN 795.

Notes: Grading method is Satisfactory/Unsatisfactory (S/U).

KIN 799 Dissertation 1-12

Individual direction in the development and execution of a doctoral dissertation.

KIN 801 Thesis Extension 1-3 Thesis Extension.

KIN 802 Dissertation Extension 1-3 Dissertation Extension.

KIN 803 Research Extension 1-3