

Kinesiology

College of Health and Human Development

Chair: Carole Oglesby
Redwood Hall (RE) 250
(818) 677-3205
www.csun.edu/hhd/kin

Staff

Ruben Avila, Sheryl Ferguson, Gail Hartung, Sue Young

Faculty

Tami Abourezk, Hooshang Bagheri, Carolyn Barbian, Sean Flanagan, Shane Frehlich, Victoria Jaque, Taeyou Jung, Steven Loy, Carole Oglesby, Jennifer Romack, Mary Jo Sariscsany, Shane Stecyk, Belinda Stillwell, Terry Sweeting, Barbara Swerkes, Paula Thomson, Konstantinos Vrongistinos, Tommie Lee White, William Whiting, Benedict Yaspelkis III

Emeritus Faculty:

Adran Adams, David Benson, Don Bethe, Muriel Bower, Judith Brame, Nicolas Breit, Samuel Britten, Pete Cassidy, Barry Devine, Darrel Guthrie, Merrill Hardy, Robert Hiebert, George Holland, Alva Johanson, Felix Jumonville, Phil Monroe, John Ramsey, George Rich, Paulette Shafranski, Richard Streid, Ann Stutts, William Vincent, Earl Wallis, Eleanor Walsh, Sam Winningham

Programs

Undergraduate:

B.S., Kinesiology with Options in:

Option I Physical Education

Option II Exercise Science

Option III Dance

Option IV General Studies

B.S., Athletic Training

Minor in Dance

Graduate:

M.S., Kinesiology

The Major:

The word kinesiology comes from the Greek, kinesis, which means "to move". Kinesiology is the study of the art and science of human movement. At California State University, Northridge, the discipline of Kinesiology is dedicated to the study of human movement and physical activity as it relates to sport, dance, and exercise.

Careers

Kinesiology has many practical applications and leads to a variety of rewarding careers such as teaching physical education or dance, coaching, serving as a consultant in the commercial health and fitness industry, working in a clinical health setting, athletic training, or working independently as a personal trainer. Many kinesiology majors become involved in scientific research or go on to advanced study in medicine, chiropractic, physical therapy, nursing, exercise physiology, biomechanics, motor learning and behavior, motor programs for special populations, sport psychology or pedagogy. Some graduates become coaches for professional teams or work in business environments dealing with sport management and marketing. Others pursue careers in dance therapy or professional dance, or physical activities for individuals with disabilities.

The current societal interest in wellness and fitness programs has led both individuals and corporations to stress preventive as well as interventive care. Because kinesiology students understand the role of movement in wellness, they have become important to innovations toward better health. Graduates of kinesiology programs work with

people in all stages of life - with children and with seniors, with the able bodied and those with disabilities, with elite performers and those of ordinary capability.

Academic Advisement

Undergraduate Coordinator: Shane Frehlich. Students are required to obtain advisement each semester in order to be cleared to register for the following semester. Additional advisement is available by appointment throughout the semester. Individual advisors are assigned to all majors; it is recommended that during the first semester as a major, each student request assignment to an advisor. This request should be initiated in the department office. Contact Victoria Jaque for graduate advisement and Belinda Stillwell for questions about Credential Programs.

Student Learning Outcomes of the Undergraduate Program

The Department of Kinesiology is a learning centered community that educates and inspires its students to understand and appreciate human movement for personal expression and wellness throughout the lifespan. In doing so, students and faculty work together to improve quality of life for themselves and their community; the department values and respects the spectrum of human diversity. An integrated approach to the teaching, learning, and application of human movement provides opportunities and experiences to achieve the following department student learning outcomes (SLOs).

1. Apply an integrated kinesiological approach to encourage the adoption of healthy and physically active lifestyles, across diverse populations.
2. Apply evidence-based practices to enhance the study of human movement.
3. Demonstrate competent problem solving strategies through intentional practices.
4. Demonstrate knowledge of kinesthetic forms, processes and structures as they apply to the personal expression and culture of human movement.

International Experience

The Department of Kinesiology supports the concept of international education and encourages students to investigate opportunities for overseas study. Certain courses taken at CSU International Program Study Centers in foreign countries are equivalent to courses in the Department of Kinesiology and may be used to fulfill some of the requirements for degree options offered by the Department and/or certain general education requirements. Students should consult the International Programs Bulletin available in the Office of International and Exchange Programs, a departmental advisor, or the campus International Programs Advisor for more information.

Requirements for Bachelor of Science Degree in Kinesiology

Lower Division Prerequisite Courses (20 Units)

1. Lower Division Science and Math Requirements (14) (Note: 8 of The 14 Units double count in General Education and the major:

BIOL	101/L	General Biology and Lab (4)
MATH	140	Introductory Statistics (4)
BIOL	211/212	Human Anatomy Laboratory Studies in Human Anatomy (2/1)
BIOL	281	Human Physiology (3)

Note: Completion of BIOL 211, BIOL 212 is prerequisite to enrollment in KIN 300. Completion of BIOL 281 is prerequisite to enrollment in KIN 346/L.

Lower Division Core (6 Units)

KIN	200	Foundations of Kinesiology (3)
KIN	201/L	Movement Forms – Sport, Dance and Exercise and Lab (2/1)

Upper Division Core (22 Units)

KIN	300	Foundations and Analysis of Human Movement (3)
KIN	305	Historical and Philosophical Bases of Kinesiology (4)
KIN	306	Socio-Psychological Aspects of Physical Activity (3)
KIN	329/L	Motor Learning and Control and Lab (3/1)
KIN	345/L	Biomechanics and Lab (3/1)
KIN	346/L	Physiology of Exercise and Lab (3/1)

Options

Students should confer with an advisor and must follow the prescribed program for one of the options outlined below:

Option I: Physical Education (34 Units)

This option provides the subject matter preparation required to earn a credential for teaching Physical Education in California public schools. Students seeking the teaching credential are advised to apply to the credential program as first-semester seniors. This is done through the Credential Office on campus. Completion of the Kinesiology major with Physical Education option, plus 31 units of professional education (including student teaching), are required for the Preliminary Credential. For details on the Single Subject Credential program, see the Credentials and Department of Secondary Education sections in this catalog.

1. Lower Division Required Courses (12 Units)

KIN	130A-133A, 151A	Martial Arts Course (1)
KIN	242	Movement Forms: Basic Dance (1)
KIN	250SW	Professional Activities: Swimming (1)
KIN	271/L	Fundamental Movement, Gymnastics and Rhythms and Lab (2/1)
KIN	272/L	Non-Traditional Games and Activities and Lab (2/1)
KIN	273/L	Analysis and Application of Games and Sport and Lab (2/1)

2. Upper Division Required Courses (22 Units)

KIN	315/L	Analysis and Application of Multi-Cultural Dance Forms for Children and Adolescents and Lab (2/1)
KIN	325/L	Motor Development and Lab (3/1)
KIN	335/L	Health and Related Fitness in K-12 Physical Education and Lab (2/1)
KIN	347	Introduction to Adaptive Physical Education (3)
KIN	371/L	Physical Education Content Development for Children and Lab (2/1)
KIN	462/L	Physical Education Content Development for Adolescents and Lab (2/1)
KIN	472/L	Learner Assessment and Technology in K-12 Physical Education and Lab (2/1)

****Note:** In the proposed program, students who wish to complete the CA APE Specialist Credential must complete an additional 23 units. Most students will complete the majority of the remaining courses post-baccalaureate.

Option II: Exercise Science (36-39 Units)

This option is designed to prepare the student with the necessary knowledge and skills to analyze movement and to conduct and administer physical fitness programs. The option is particularly valuable for the student interested in employment in fitness assessment labs or fitness centers as well as those intending to pursue graduate study.

In addition, this option prepares students to pursue further study in allied health programs such as physical therapy, occupational therapy, physician's assistant, and chiropractic.

1. Lower Division Required Courses* (8-9 Units)

PHYS 100A/L General Physics and Lab (3/1)
(Satisfies G.E., Natural Sciences)

Select one of the following:

CHEM 101/L General Chemistry and Lab (4/1)
(Satisfies G.E., Natural Sciences)

or CHEM 103 Introductory Chemistry I (4)
(Satisfies G.E., Natural Sciences)

(CHEM 101/L recommended for students planning a career in Physical Therapy)

* Students may take these courses to satisfy up to 8 units of G.E: Natural Sciences.

2. Upper Division Required Courses (10 Units)

KIN 325/L Motor Development and Lab (3/1)

KIN 445** Quantitative Biomechanics (3)

KIN 446/L Research in Exercise Physiology and Lab (2/1)

** Completion of either MATH 104 or 105 (GE Basic Skills, Mathematics) or equivalent is a prerequisite to KIN 445.

3. Electives (15 Units)

Select 15 units with approval of advisor:

KIN 311/L Adapted Therapeutic Exercise Principles and Applications and Lab (2/1)

KIN 313/L Adapted and Therapeutic Aquatic Exercise and Lab (2/1)

KIN 337/L Introduction to Athletic Training and Lab (2/1)

KIN 402/L Computer Applications in Kinesiology and Lab (2/1)

KIN 415 Medical Aspects of Sport and Related Injuries (3)

KIN 436 Applied Exercise and Sports Physiology (3)

KIN 456 Adult Exercise Program Design (3)

KIN 476 Musculoskeletal Biomechanics and Injury (3)

KIN 479 Perception and Movement (3)

KIN 494 Academic Internship (1-3)

KIN 499 Independent Study (1-3)

KIN 560 Clinical EKG and Exercise Stress Testing (3)

KIN 575/L Biomechanical Analysis Techniques and Lab (2/1)

Elective: Upper Division KIN elective with prior approval of advisor (1-3)

Option III: Dance (25 Units)

This option is designed to provide a basis for dance experience and potential employment opportunities in the field of performance, choreography and teaching.

Select 25 units with advisor's approval. It is recommended that students take dance technique courses along with theoretical courses.

Theory Courses:

KIN 314/L Creative Dance for Children and Lab (2/1)

KIN 315/L Advanced Dance Analysis of Dance Forms-Social (3)

KIN 316/L Choreographic Form and Lab (2/1)

KIN 317 Advance Analysis of Dance Forms: Ballet, Jazz, Modern (3)

KIN 380/L Perspectives of Dance (2/1)

KIN 325/ L Motor Development and Lab (2/1)

KIN 426 Choreography (3)

KIN 427 Dance Production (3)

KIN 428 Aesthetics and Human Movement (3)

KIN	494A-C	Supervised Individual Projects (1-3)
KIN	498W A-C	Dance Concert Modes (1-3)
KIN	499 A-C	Independent Study (1-3)

Technique Courses:

KIN	318BAL	Intermediate Classical and Contemporary Ballet (3-3)
KIN	418BAL	Advanced Classical and Contemporary Ballet (3-3)
KIN	319	Intermediate Modern Dance (3-3)
KIN	419	Advanced Modern Dance (3-3)

Option IV: General Studies (25 Units)

This option is designed to meet the needs of students who seek a general program in Kinesiology or who have special interests in areas not represented in the preceding options. Students completing this option have the opportunity to explore both the subdisciplinary and the applied areas of the field of study.

1. Select at least 3 units from each of the following areas:**Biological/Mechanical**

KIN	325/L	Motor Development and Lab (3/1)
KIN	445	Quantitative Biomechanics (3)
KIN	446/L	Research in Exercise Physiology and Lab (2/1)

Arts/Humanities/History

KIN	380/L	Perspectives of Dance and Lab (2/1)
KIN	426	Choreography (2)
KIN	427	Dance Production (3)
KIN	428	Aesthetics of Human Movement (3)

Social/Cultural

KIN	385	Women in Sport (3)
KIN	407	Sport, Culture, and Society (3)
KIN	408	The Olympic Games (3)

Clinical

KIN	311/L	Adapted Therapeutic Exercise Principles and Applications and Lab (2/1)
KIN	313/L	Adapted and Therapeutic Aquatic Exercise and Lab (2/1)
KIN	337/L	Introduction to Athletic Training and Lab (2/1)
KIN	347	Introduction to Adaptive Physical Education (3)
KIN	429	Perceptual Motor Problems of the Atypical Student (3)
KIN	436	Applied Exercise and Sports Physiology (3)
KIN	456	Adult Exercise Program Design (3)

Teaching/Coaching

KIN	310	Visualization and Sport (3)
KIN	315/L	Analysis and Application of Multi-Cultural Dance Forms for Children and Adolescents and Lab (2/1)
KIN	317	Advanced Analysis of Dance Forms: Ballet, Jazz, Modern (3)
KIN	320/L	Advanced Techniques of Team Sports and Lab (2/1)
KIN	330/L	Advanced Techniques of Individual Sports and Lab (2/1)
KIN	350-359	Coaching Courses (2)
KIN	370/L	P.E. in Early Childhood Education and Lab (2/1)
KIN	404	Problems of School Athletics (2)
KIN	420	Coaching Competitive Sports (3)
KIN	471/L	Developmental Movement Programs for Children and Lab (2/1)

2. Select a minimum of 10 additional upper division units in Kinesiology courses with approval of an advisor.**General Education (48 Units)**

Undergraduate students must complete 48 units of General Education as described in this catalog.

When students select BIOL 101/L (3/1) that is required in the major to satisfy 4 units of GE: Natural Sciences, and MATH 140 (4) that is required to satisfy 4 units of GE: Basic Skills, Mathematics, the GE total is reduced to 40 units. In selected options, there are additional "overlap" units for courses that count in meeting both major requirements and General Education requirements. Students should meet with a department advisor before selecting General Education courses. Failure to select overlapping courses may result in additional units in the major for selected options.

Total Units Required for the Degree	120-124
-------------------------------------	---------

Requirements for the Bachelor of Science Degree in Athletic Training

Athletic Training Education Program (ATEP) has a separate application from the CSUN admissions process. Admission criteria include GPA, observation hours, letters of recommendation and a personal interview with the selection committee. For further information, please go to the ATEP website; it is located on the Kinesiology Department website (www.csun.edu/hhd/kin) ATEP is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The 2.5 year ATEP provides students with academic and clinical experiences designed to prepare them for the Board of Certification (BOC) examination and a successful career in the field.

1. Lower Division Kinesiology Prerequisites Courses (10 Units)

BIOL	101/L	General Biology and Lab (Satisfies GE, Natural Sciences) (3/1)
BIOL	211	Human Anatomy (2)
BIOL	212L	Laboratory Studies in Human Anatomy (1)
BIOL	281	Human Physiology (3)
MATH	140	Introductory Statistics (4)

2. Lower Division Kinesiology Core (6 Units)

KIN	200	Foundations of Kinesiology (3)
KIN	201/L	Movement Forms- Sport, Dance and Exercise (2/1)

3. Upper Division Kinesiology Core Courses (22 Units)

KIN	300	Fundamentals and Analysis of Human Movement (3)
KIN	305	Historical and Philosophical Bases of Kinesiology (4)
KIN	306	Socio-Psychological Aspects of Physical Activity (3)
KIN	329/L	Motor Learning and Control and Lab (3/1)
KIN	345/L	Biomechanics and Lab (3/1)
KIN	346/L	Physiology of Exercise and Lab (3/1)

4. Lower Division Athletic Training Required Courses (9 Units)

FCS	207	Nutrition for Life (GE, Lifelong Learning) (3)
PSY	150	Principles of Human Behavior (GE, Social Sciences) (3)
PHYS	161	Physics and Experience (GE, Natural Sciences) (2)

5. Upper Division Athletic Training Required Courses (47 units)

HSCI	336	Health Aspects of Drug Use (3)
HSCI	345	Public Health Issues- (GE, Social Sciences) (3)
KIN	333	Injury Prevention Clinical Reasoning (2)
KIN	334	Evaluation and Rehabilitation Clinical Reasoning (2)

KIN	337/L	Introduction to Athletic Training and Lab (2/1)
KIN	338/L	Lower Extremity Injury Evaluation Techniques/Lab (2/1)
KIN	339/L	Upper Extremity Injury Evaluation and Lab (2/1)
KIN	340	Medical Documentation (1)
KIN	341	Prevention and Evaluation Clinical Experience (1)
KIN	342	Rehabilitation and Evaluation Clinical Experience (1)
KIN	349	General Medical Conditions (3)
KIN	437	Athletic Training Administration (3)
KIN	441	Administration and Treatment Clinical Experience (1)
KIN	442	Advanced Clinical Experience Techniques (1)
KIN	443	Advanced Activities Clinical Reasoning (2)
KIN	444	Professional Preparation (2)
KIN	457/L	Therapeutic Modalities in Sports Medicine Lab (2/1)
KIN	467/L	Therapeutic Exercise Techniques and Lab (2/1)
	Open Elective (3)	
	Open Elective (3)	

Total Units Required for the B.S. Degree	125
--	-----

Minor in Dance

The Minor in Dance is designed to provide a basis for dance experience and potential employment opportunities in the field of performance, choreography and teaching. Two minor options are available. The Dance Pedagogy option focuses on acquiring the necessary skills needed to teach dance within school and community settings. The Dance Performance options focuses on acquiring the necessary skills to enhance technical facility as a dancer and to choreograph and mount new works for stage, film and/or television.

Courses relevant to dance taken in Department of Theater or Music may also count towards a Minor in Dance. Advisors in the Department of Kinesiology are available for student consultation.

A. Option I. Dance Pedagogy (21 Units):

Select 6 units from the following courses dance technique courses:

KIN	137	Dance,Ballroom I (1)
KIN	139A	Ballet I (1)
KIN	139B	Ballet II (1)
KIN	140A	Dance, Folk I (1)
KIN	140B	Dance, Folk II (1)
KIN	141A	Jazz Dance (1)
KIN	142A	Dance, Latin America (1)
KIN	144A	Modern Dance (1)
KIN	145A	Dance, Square and Round (1)
KIN	318	Intermediate Classical and Contemporary Ballet Technique (3)

Select 15 units from the following courses dance theory/laboratory. Note that all of the following courses include enrollment by instructor consent as a prerequisite.

KIN	314/L	Creative Dance for Children and Lab (2/1)
KIN	315/L	Analysis and Application of Multi-Cultural Dance Forms for Children and Adolescents and Lab (2/1)
KIN	317	Advanced Analysis of Dance Forms: Ballet, Jazz, Modern (3)
KIN	325/L	Motor Development and Lab (3/1)
KIN	380/L	Perspectives of Dance and Lab (2/1)
KIN	428	Aesthetics of Human Movement (3)
KIN	471/L	Developmental Movement Programs for Children and Lab (2/1)

B. Option II. Dance Performance (21 Units):

Select 12 units from the following dance technique courses:

KIN	137	Dance,Ballroom I (1)
KIN	139A	Ballet I (1)
KIN	139B	Ballet II (1)
KIN	140A	Dance, Folk I (1)
KIN	140B	Dance, Folk II (1)
KIN	141A	Jazz Dance (1)
KIN	142A	Dance, Latin America (1)
KIN	144A	Modern Dance (1)
KIN	145A	Dance, Square and Round (1)
KIN	318	Intermediate Classical and Contemporary Ballet Technique (3)
KIN	418	Advanced Classical and Contemporary Ballet Technique (3)

Select 9 units from the following courses dance theory/laboratory courses. Note that all of the following courses include enrollment by instructor consent as a prerequisite.

KIN	236/L	Introduction to Choreography and Lab (2/1)
KIN	316/L	Choreographic Forms and Lab (3)
KIN	426	Choreography (2)
KIN	427	Dance Production (3)
KIN	380/L	Perspectives of Dance and Lab (2/1)
TH	342	Intermediate Stage Movement (2)
TH	442	Advanced Stage Movement (2)

Total Units Required for the Minor	21
------------------------------------	----

Requirements for the Master of Science Degree

The graduate program provides for advanced professional preparation and for introduction to research in an area of specialization.

A. Department Requirements

In addition to University requirements, the Department of Kinesiology requires:

1. Grade point average (GPA) of 2.75 in the last 60 units of undergraduate work (with a 3.0 GPA preferred).
2. Completion of the Graduate Record Examination (GRE) with scores submitted as part of the application (i.e., prior to admission).
3. Submission of the following, addressed to the department's Graduate Coordinator:
 - a. Three letters of recommendation
 - b. Statement of Intent discussing the applicant's interests and goals as they relate to a graduate degree in kinesiology.

B. Admission to Classified Status

Students must be admitted to classified status prior to completion of more than 12 units of graduate coursework. Admission to classified graduate status in the program requires:

1. Undergraduate degree in Kinesiology or a related field, or completion of department course prerequisite requirements. In satisfying the course prerequisite requirements, each course must be completed with a grade of "B" or higher.
2. Passing score (8 or above) on the Upper Division Writing Proficiency Exam.
3. For students with overall undergraduate GPA below 3.0, a score at or above the 50th percentile on at least one of the three sections of the Graduate Record Examination (GRE).
4. Submission of Request for Classification form approved by the Department Graduate Coordinator.

In addition to maintaining an overall grade point average of 3.0 or higher in all courses taken towards the Master's degree, students must complete KIN 605 (Research Methods and Design) and either KIN 610 (Quantitative Analysis of Research in Kinesiology) or KIN 695QRE (Qualitative Research Design) with a grade of "B" or higher in each.

1. Required Courses (12 Units)

KIN 605 Research Methods and Design (3)

Select one of the following:

KIN 610 Quantitative Analysis of Research in Kinesiology (3)

KIN 695QRE Qualitative Research Design (3)

Select two courses from the following with approval of advisor:

KIN 603 Seminar in Pedagogy of Kinesiology (3)

KIN 606 Seminar in Social Psychology of Sport (3)

KIN 607 Seminar in Sport History (3)

KIN 645 Seminar in Biomechanics (3)

KIN 646 Seminar in Exercise Physiology (3)

KIN 647 Seminar in Adapted Physical Activity (3)

KIN 679 Seminar in Motor Behavior (3)

2. Electives (18 Units)

Select from the following with approval of an advisor or thesis chair:

400-level: KIN 407, 408, 426, 427, 428, 429, 436, 437, 445, 446/L, 447/L, 448/L, 449, 451/L, 456, 476, 479, 496SP, 498

500-level: KIN 503, 520, 526/L, 547, 560, 566, 575/L, 579

600-level: KIN 600, 602, 603, 606, 607, 618, 626, 642, 645, 646, 647, 652, 654, 656, 679, 695A-Z, 696 A-C, 698A-C, 699A-C

Note that of the total 30 units required for the degree, at least 21 must be in 500 or 600-level courses.

Total Units Required for the M.S. Degree

30

Course List

(For Varsity Athletics courses, see Intercollegiate Athletics Program)

KIN 115A. Adapted and Therapeutic Exercise (1-1-1-1)

Special course designed for men and women unable to participate in regular activity classes. Classification is made by University physician. Course may be repeated for 4 units of credit. (Available for General Education, Lifelong Learning)

KIN 116A. Adapted Sports I (1-1)

Designed for students whose physical condition requires adaptation of aquatics, sports and rhythms. Course may be repeated for credit. (Available for General Education, Lifelong Learning)

KIN 117. Adapted Aquatic Exercise (1-1-1)

Prerequisite: Medical release with doctor's approval. Provides an aquatic exercise program designed for students with physical disabilities. Students develop strength, flexibility, cardiovascular endurance, posture, balance and improved ambulation through the application of adapted and therapeutic aquatic exercise. Concepts of water safety, physics of aquatic activity and specific movement skills are addressed. Course may be repeated for credit. (Available for General Education, Lifelong Learning)

KIN 120/L. Arts Immersion: Dance and Lab (1/1)

Prerequisite: Restricted to students in ITEP-Freshman Option. Corequisite: KIN 120L. Introductory course in study of dance as an art form. Concepts of dance are explored as a means of personal expression. Students engage in creative dance activities and multicultural and international dance forms. Students extend and integrate their knowledge of dance to all the visual and performing arts. One hour lecture; two hours lab per week.

KIN 122A. Badminton I (1)

Development of skill in playing badminton, including rules, etiquette, and techniques. (Available for General Education, Lifelong Learning)

KIN 124A. Basketball I (1)

Development of understanding of rules, strategies and basic skills in competitive basketball. (Available for General Education, Lifelong Learning)

KIN 125A. Fitness For Life (1)

Introductory course offering a wide variety of conditioning activities (i.e. general aerobics, jogging, weight training, stretching) designed to increase the individual's understanding of conditioning principles and level of fitness necessary for participation in sports or other conditioning activity courses. (Available for General Education, Lifelong Learning)

KIN 126A. Strength Training (1)

Designed to emphasize physical fitness with special emphasis on muscular strength. Evaluation of individual needs and fitness programming are included. (Available for General Education, Lifelong Learning)

KIN 129A. Running Conditioning I (1)

Development of skill and training methodology for intermediate, distance and cross country running. (Available for General Education, Lifelong Learning)

KIN 129B. Running Conditioning II (1)

Prerequisite: KIN 129A. Development of advanced skills and training methodology for intermediate to long-distance and cross-country running.

KIN 130A. Karate I (1)

Development of skill in basic techniques of Japanese karate, including self defense and an examination of karate history, philosophy and traditions. (Available for General Education, Lifelong Learning)

KIN 130B. Karate II (1)

Prerequisite: KIN 130A. Continuing development of skill in intermediate and advanced techniques of Japanese karate, including further knowledge of history and traditions of the activity.

KIN 130C. Karate III (2)

Prerequisite: KIN 130B. Prepares students for tournament level performance. Students refine abilities to react to situations and appropriately combine skills. Students develop the power and speed of movement required in competitive situations.

KIN 131A. Taekwondo (1)

Development of skill in basic techniques of Korean martial art, including self-defense and an examination of Taekwondo history, philosophy and traditions. (Available for General Education, Lifelong Learning)

KIN 132A. Aikido (1)

Study of the techniques and philosophy of Aikido, a Japanese martial art. Focus on control techniques and is based on a blending of movement and intention so that what appears as a combative situation can be resolved without conflict. (Available for General Education, Lifelong Learning)

KIN 133A. Tai Chi Ch'uan (1)

Study of the philosophy and basic techniques of Tai Chi Ch'uan with special focus on breathing, fluidity of movement, and the application of the techniques to other physical disciplines. (Available for General Education, Lifelong Learning)

KIN 134. Shaolin Kung Fu (1)

Study of the philosophy and basic techniques of Kung Fu with special focus on breathing, fluidity of motion and the application of the techniques to other physical disciplines. (Available for General Education, Lifelong Learning)

KIN 135A. Aerobic Dance I (1)

Exercises designed specifically for improving cardiovascular function and physical fitness through the mode of dynamic rhythmic dance movements. (Available for General Education, Lifelong Learning)

KIN 136A. Aqua Aerobics (1)

For swimmers and non-swimmers designed specifically to improve cardiovascular endurance, strength, agility and flexibility through the mode of free dynamic movement in the water. The water provides resistance and buoyancy that promotes a workout virtually free of orthopedic stress. (Available for General Education, Lifelong Learning)

KIN 137A. Dance, Ballroom I (1)

Survey, analysis, practice, and development of social dance etiquette and of proficiency in the fundamental skills of ballroom dancing.

KIN 139A. Ballet I (1)

Development of proficiency in basic ballet skills, and development of understanding and appreciation for ballet as an art form. (Available for General Education, Arts and Humanities)

KIN 139B. Ballet II (1)

Prerequisite: KIN 139A. Continued study of ballet techniques with emphasis on combinations of basic skills.

KIN 140A. Dance, Folk I (1)

Development of proficiency in folk dance skills, and development of understanding and appreciation for folk dancing.

KIN 140B. Dance, Folk II (1)

Prerequisite: KIN 140A. Development of intermediate folk dance skills with emphasis on style and rhythm, as well as an understanding and appreciation of the cultural background of folk dancing.

KIN 141A. Jazz Dance I (1)

Development of proficiency in jazz dance techniques, skill and development of an understanding and appreciation of jazz dance as an art form.

KIN 142A. Dance, Latin America I (1)

Development of proficiency in Latin American folk dance skills, in choreography, and in performance of group dances based upon the traditional forms. Introduction to historical background of music.

KIN 143. Urban Street Dance (1)

Development of proficiency in urban street dance styles, including the most current forms found in popular urban youth culture and understanding its socio-ethnic origins and aesthetics

KIN 144A. Dance, Modern I (1)

Development of proficiency in modern dance technique skills, and development of an understanding and appreciation for modern dance as an art form. (Available for General Education, Arts and Humanities)

KIN 145A. Dance, Square and Round I (1)

Development of square and round dance skills, etiquette, understanding and appreciation.

KIN 148 Dance Conditioning and Somatic Practices (1)

Develop proficiency and increased knowledge about dance conditioning practices, with the goal to improve stability, strength and awareness. (Available for General Education, Lifelong Learning)

KIN 149. Yoga (1)

Philosophy and basic techniques of Yoga. Through asanas (postures), stretches, and deep breathing, flexibility and strength are developed and all systems of the body are revitalized. Deep breathing, relaxation and meditation techniques enhance overall health and improve ability to handle stress. (Available for General Education, Lifelong Learning)

KIN 151A. Personal Defense (1)

Instruction and practice in the basic techniques of anticipating, avoiding, and, when necessary, protecting oneself from attack. Emphasis is on the avoidance of physical confrontation and the discouragement of an attacker. (Available for General Education, Lifelong Learning)

KIN 152A. Soccer I (1)

Designed to practice performance techniques, analyze strategies and promote team play and sportsmanship in soccer. (Available for General Education, Lifelong Learning)

KIN 155A. Golf I (1)

Development of basic skill in playing golf, including rules, etiquette and background. (Available for General Education, Lifelong Learning)

KIN 155B. Golf II (1)

Prerequisite: KIN 155A. Development of proficiency in performance of golf skills beyond the elementary level, with special emphasis on the short game, game techniques, and links play.

KIN 160A. Gymnastics Apparatus - Men I (1)

Development of proficiency in intermediate tumbling and gymnastics skills, including use of trampoline, mats, and heavy apparatus. (Available for General Education, Lifelong Learning)

KIN 161A. Gymnastics Apparatus - Women I (1)

Development of skills, appreciation and techniques for the balance beam, uneven parallel bars, side horse, and floor exercise. (Available for General Education, Lifelong Learning)

KIN 164A. Handball I (1)

Development of proficiency in handball skills, including rules, etiquette, and techniques of playing handball. (Available for General Education, Lifelong Learning)

KIN 167A. Racquetball I (1)

Development of proficiency in racquetball skills, knowledge of rules, and techniques and basic strategy. (Available for General Education, Lifelong Learning)

KIN 171A. Softball I (1)

Development of proficiency in softball skills, including strategy, officiating rules, and appreciations. (Available for General Education, Lifelong Learning)

KIN 176A. Springboard Diving I (1)

Prerequisite: KIN 178A. Development of proficiency in basic diving skills and in performance of specialized diving in the various classified categories.

KIN 177A. Swimming For Non-swimmers (1)

Introduction for the non-swimmer which includes fundamental skills for basic swimming strokes, safety and survival techniques. (Available for General Education, Lifelong Learning)

KIN 178A. Swimming I (1)

Practice in performance and analysis of swimming, diving and other aquatic skills at the elementary level. (Available for General Education, Lifelong Learning)

KIN 179A. Swimming Conditioning (1)

Survey of various training methods and development of physical fitness utilizing aquatic activity. (Available for General Education, Lifelong Learning)

KIN 185A. Tennis I (1)

Development of skill in playing tennis, inclusion of etiquette, rules, and techniques. (Available for General Education, Lifelong Learning)

KIN 185B. Tennis II (1)

Prerequisite: KIN 185A. Development of higher proficiency in performance of tennis skills with special emphasis on game strategy.

KIN 191A. Track and Field I (1)

Introduction to and development of basic skills in selected running, jumping, and throwing events. (Available for General Education, Lifelong Learning)

KIN 195A. Volleyball I (1)

Development of proficiency in volleyball skills, including background, rules and strategy. (Available for General Education, Lifelong Learning)

KIN 195B. Volleyball II(1)

Prerequisite: KIN 195A. Development of a high degree of skill performance with special emphasis on team strategy.

KIN 196A-Z. Experimental Topics Courses (1-2)

Selected activity courses with content to be determined.

KIN 200. Foundations of Kinesiology (3)

Using a holistic and integrated approach, students will actively explore the multi-faceted field of Kinesiology. Course/student outcomes will include exposure to and development of liberal learning skills, professional development, a working definition and appreciation for the field, and the initiation of a portfolio.

KIN 201/L. Movement Forms – Sport, Dance and Exercise and Lab (2/1)

Corequisite: KIN 201L. Introduction for the major student to various movement forms (sport, dance, exercise) from the perspective of performer, practitioner and researcher. A core course which serves as a base for continued study of the knowledge and applications of kinesiology.

KIN 230. Introduction To Adapted Therapeutic Exercise (2)

Basic concepts of exercise and their practical applications for individuals with disabilities are covered. Concurrent laboratory class is designed to provide hands-on experiences in Adapted Therapeutic Exercise program, working with individuals with various physical disabilities under clinical supervision at the Center of Achievement.

KIN 230L. Introduction To Adapted Therapeutic Exercise Lab (1)

Laboratory class designed to provide hands-on experiences in Adapted Therapeutic Exercise program, working with individuals with various physical disabilities under clinical supervision at the Center of Achievement.

KIN 236. Introduction To Choreography (2)

Prerequisite: Instructor consent. Principles of dance composition; movement sources, rhythmic, spatial and dynamic techniques of organization, thematic development. Composition of solo and small group dances. (Available for General Education, Arts and Humanities)

KIN 236L. Introduction To Choreography Lab (1)

Lab practice in choreography.

KIN 240. Conceptual Basis of Kinesiology (1)

Introduction to the study and application of the body of knowledge of Kinesiology.

KIN 241/L. Movement Forms: Exercise and Lab (1/1)

Corequisite: KIN 241L. Development of elementary physiological, biomechanical and behavioral concepts and skills in movement fundamentals and body conditioning. Application of these principles to different populations for the development and maintenance of life long physical conditioning. 1-unit (activity); 1-unit lab.

KIN 242. Movement Forms: Basic Dance (1)

Introduction for the major student to the study of stylized dance (social, ethnic, ballet, jazz) as a human movement form. Serves as a base for continued study of the knowledge and applications of Kinesiology.

KIN 243/L. Movement Forms: Sport and Lab (1/1)

Corequisite: KIN 243L. Introduction for the major student to the study of sport as a human movement form. Serves as a base for continued study of the knowledge and applications of kinesiology.

KIN 244. Movement Forms: Dance (1)

Introduction for the major student to the study of dance as a human movement form. Serves as a base for continued study of the knowledge and applications of Kinesiology.

KIN 250BD. Professional Activities: Badminton (1)

Designed for Kinesiology majors. Development of skills, and knowledge of concepts, rules, and strategy in the sport of badminton.

KIN 250BS. Professional Activities: Baseball/softball (1)

For Kinesiology majors. Development of skills, and knowledge of concepts, rules, and strategy in the sports of baseball and softball.

KIN 250BK. Professional Activities: Basketball (1)

For Kinesiology majors. Development of skills, and knowledge of concepts, rules, and strategy in the sport of basketball.

KIN 250DB. Professional Activities Dance: Ballet (1)

For Kinesiology majors. Development of proficiency in basic and intermediate ballet skills. Appreciation and understanding of ballet as an art form.

KIN 250DJ. Professional Activities Dance: Jazz (1)

For Kinesiology majors. Development of proficiency in basic and intermediate skills of jazz dance and an appreciation and understanding of jazz dance as an art form.

KIN 250DS. Professional Activities Dance: Social (1)

For Kinesiology majors. Development of proficiency in social dance skills including ballroom, contra, ethnic, and square. Appreciation and understanding of these dance forms and their place in contemporary, multi-ethnic society.

KIN 250FB. Professional Activities: Football (1)

For Kinesiology majors. Development of skills and knowledge of concepts, rules and strategy in the sport of football.

KIN 250GO. Professional Activities: Golf (1)

For Kinesiology majors. Development of skills, and knowledge of concepts, rules, and strategy in the sport of golf.

KIN 250GY. Professional Activities: Gymnastics (1)

For Kinesiology majors. Development of skills and knowledge of concepts, rules and strategy in the sport of gymnastics.

KIN 250RQ. Professional Activities:racquetball (1)

For Kinesiology majors. Development of skills and knowledge of concepts, rules and strategy in the sport of racquetball.

KIN 250SO. Professional Activities: Soccer (1)

For Kinesiology majors. Development of skills and knowledge of concepts, rules and strategy in the sport of soccer.

KIN 250SW. Professional Activities: Swimming (1)

For Kinesiology majors. Development of skills, and knowledge of concepts, rules, and strategy in the sport of swimming.

KIN 250TN. Professional Activities: Tennis (1)

For Kinesiology majors. Development of skills, and knowledge of concepts, rules, and strategy in the sport of tennis.

KIN 250TF. Professional Activities: Track and field (1)

For Kinesiology majors. Development of skills, and knowledge of concepts, rules, and strategy in the sport of track and field.

KIN 250VB. Professional Activities: Volleyball (1)

For Kinesiology majors. Development of skills, and knowledge of concepts, rules, and strategy in the sport of volleyball.

KIN 260/L. Lifeguarding and Lab (1/1)

Prerequisite: Instructor consent. Corequisite: KIN 260L. Techniques of lifesaving for the advanced swimmer. Meets American Red Cross requirements for lifeguard training. Topics include rescue skills, techniques and equipment; conditioning; and emergency action plans. One hour lecture; two hours lab per week.

KIN 261. Water Safety Instructor (2)

Prerequisites: Instructor consent. Theory and study for teaching water safety techniques and procedures. Completion of course also includes meeting the proficiency requirements for American Red Cross water safety certification.

KIN 271/L. Fundamental Movement, Gymnastics and Rhythms and Lab (3)

Prerequisite: KIN 200 or KIN 240. An introductory course in the fundamental movement patterns appropriate for the developing child in elementary physical education. This course is designed to develop competency in these fundamental movement patterns. Students will develop competency in knowledge and understanding of ways in which motor skills can be organized into developmentally appropriate progressions in a variety of movement settings including educational games, gymnastics, rhythms and dance. Systematic observations of children during field experiences will be provided.

KIN 272/L. Non-traditional Games and Activities and Lab (2/1)

Recommended Preparatory: KIN 201/L. *Prerequisite: KIN 200 or KIN 240.* Students will be introduced to a variety of non-traditional games and activities that include team challenges, problem solving activities, and cooperative games. Students will actively explore the impact of non-traditional games and activities for the K-12 setting.

KIN 273/L. Analysis and Application of Games and Sport and Lab (2/1)

Recommended Preparatory: KIN 201/L. Prerequisites: KIN 200 or KIN 240. Course designed to facilitate enhanced performance and analysis of sport/game skills through a tactical understanding of a variety of invasion (e.g. basketball, soccer, lacrosse, football, speedball, ultimate frisbee, hockey), net wall (e.g. volleyball, badminton, pickleball) and target games (e.g. bocce, golf, Frisbee golf).

KIN 275. Musculoskeletal Foundations of Human Movement (3)

Prerequisite: BIOL 101. Comprehensive introduction to the human skeletal, muscular, nervous, and cardiorespiratory systems with emphasis on how these systems are involved in the production, control and modification of human movement.

KIN 296A-Z. Experimental Topics Courses in Kinesiology (1-3)

Selected topics in kinesiology with course content to be determined.

Upper Division

KIN 300. Foundations and Analysis of Human Movement (3)

Prerequisites: BIOL 211/212. Examination of anatomical and neuromechanical concepts relevant to human movement analysis and muscular control of movement. Application of functional anatomy to fundamental movements and select movement forms in exercise, sport, and dance, emphasizing movement analysis across the life span and across a full range of abilities.

KIN 302. Measurement and Evaluation in Kinesiology (3)

Study of measurement and statistical theory applied to data from tests common to exercise, sport and dance.

KIN 304. Dance and The Child (1)

Prerequisites: KIN 120/L; Restricted to students in the ITEP Freshman Option. Provides students the opportunity to revisit dance (creative, multicultural and international dance forms) and apply their knowledge of this area to working with children. Students extend and integrate their knowledge of dance to all of the visual and performing arts. Experiences include planning, teaching and assessing dance lessons in field based settings. Students also engage in critical analysis and reflection to discover ways to guide children in three unique roles: as creators, performers, and observers of dance as an art form.

KIN 305. Historical and Philosophical Bases of Kinesiology (4)

Prerequisites: KIN 200 or KIN 240. Survey of the historical and philosophical bases of physical education.

KIN 306. Socio-psychological Aspects of Physical Activity (3)

Examination of the socio-psychological setting for physical activity with an emphasis on social values, individual and collective behavior, and group interaction.

KIN 310. Visualization and Sport (3)

Examination of approaches for helping athletes understand, develop, and/or refine visual and mental skills and strategies essential for maximizing athletic performance.

KIN 311/L. Adapted Therapeutic Exercise Principles and Applications and Lab (2/1)

Prerequisite: KIN 201 or KIN 241. Corequisite: KIN 311L. Lecture and laboratory courses designed to introduce principles and applications in adapted therapeutic exercise. Lab: Hands-on experiences in working with individuals with various physical disabilities are provided under clinical supervision at the Center of Achievement.

KIN 312. Conceptual Foundations of Kinesiology and Physical Education (3)

Not available for credit for Kinesiology majors. Significant aspects of the historical-philosophical, socio-psychological and pediatric exercise dimensions of Kinesiology and Physical Education.

KIN 313/L. Adapted and Therapeutic Aquatic Exercise And Lab (2/1)

Prerequisite: KIN 201 or KIN 241. Corequisite: KIN 313L. Lecture and laboratory courses designed to introduce a theoretical overview of the benefits of adapted and therapeutic aquatic exercise for individuals with physical limitations. Lab: Hands-on experiences in working with individuals with various physical disabilities are provided under clinical supervision at the Center of Achievement.

KIN 314/L. Creative Dance For Children and Lab (2/1)

Corequisite: KIN 314L. Study of the elements of time, space, and energy as related to children's dance as an art form. Principles, techniques, and exploration of directions of teaching dance to children. Two hours lecture; two hours lab.

KIN 315/L. Analysis and Application of Multi-cultural Dance Forms For Children and Adolescents and Lab (2/1).

Prerequisites: KIN 201/L and KIN 242; Corequisite 315/L. Analysis of basic to intermediate skills of multi-cultural dance including ballroom, contra, ethnic, round and square. Students develop performance analysis skills and the ability to plan and conduct instructional activities in multi-cultural dance.

KIN 316/L. Choreographic Forms and Lab (2/1)

Prerequisite: KIN 236. *Corequisite:* KIN 316L. Study of preclassical, classic, and modern forms, and dramatic and group forms with practical application in composition of solo and group dances. Lecture and lab taken concurrently: two hours lecture; two hours lab.

KIN 317. Advanced Analysis of Dance Forms- Ballet, Jazz, Modern (3)

Prerequisites: KIN 242. Analysis of basic to intermediate skills of ballet, jazz, and modern dance. Organizing and conducting of dance classes, demonstrations, concerts, and other special dance activities in a school setting. Students develop performance analysis skills and ability to plan and conduct instructional activities in ballet, jazz and modern dance.

KIN 318. Intermediate Classical and Contemporary Ballet Technique (3)

Prerequisite: KIN 139B or KIN 244 or KIN 144 or KIN 141 or KIN 496BAL or Instructor permission. Recommended Preparatory: Previous Formal Dance Training. An intermediate course for undergraduate dance specialists in classical and contemporary ballet technique. May be repeated to a maximum of six units in different semesters (6 studio hours)

KIN 320/L. Advanced Techniques of Team Sports and Lab (2/1)

Corequisite: KIN 320L. Analysis of basic to intermediate skills of team sports including basketball, flag football, soccer, softball, and volleyball. Discussions, demonstrations, analysis and practice of team strategies, drill situations and appropriate progressions for acquiring skills. Experience in planning and organizing practice sessions in team sports.

KIN 322. Advanced Analysis of Exercise Forms/ Aerobic Dance (2)

Prerequisites: KIN 241. Advanced analysis, for instructional purposes, of the exercise form commonly known as aerobic dance. Development of knowledge and skill in planning and conducting aerobic dance experiences. Theory of aerobic dance exercise design.

KIN 325/L. Motor Development and Lab (3/1)

Prerequisites: KIN 200, KIN 201. *Corequisite:* KIN 325L. Study of age-related changes in motor skills, the processes that underlie these changes, and the factors that influence them.

KIN 329/L. Motor Learning and Control and Lab (3/1)

Corequisite: KIN 329L. Theoretical foundation for the learning and control of motor skills with specific emphasis on the interpretation of this knowledge for the structuring of the learning environment. Lab experiences in the basic concepts of motor learning/control and an introduction to motor behavior research.

KIN 330/L. Advanced Techniques of Individual Sports and Lab (2/1)

Corequisite: KIN 330L. Methods of organizing and teaching individual and dual sports: badminton, golf, swimming, tennis and track. Includes class organization procedures and practices; lab practice.

KIN 333. Injury Prevention Clinical Reasoning (2)

Prerequisites: KIN 338/L; *Corequisite:* KIN 341. ATs will practice clinical reasoning and differential diagnosis skills via case studies, while integrating knowledge and skills from injury prevention, lower extremity evaluation and rehabilitation domains. Open to ATs only.

KIN 334. Evaluation and Rehabilitation Clinical Reasoning (2)

Prerequisite: KIN 333; *Corequisite:* KIN 342. ATs will practice clinical reasoning and differential diagnosis skills via case studies, while integrating knowledge and skills from previous coursework. Advanced functional activities/ patterns will also be analyzed. Open to ATs only.

KIN 335/L. Health Related Fitness in K-12 Physical Education and Lab (2/1)

Corequisite: KIN 335L. Course to facilitate physical education students' knowledge, skills, appreciation, and confidence needed to lead school aged children in the development of active, healthy lives.

KIN 337/L. Introduction To Athletic Training and Lab (2/1)

Prerequisites: BIOL 211/212; *Corequisite:* KIN 337L. An introductory course to the field of athletic training. The history of the athletic training profession, the role of the athletic trainer as part of the sports medicine team, pharmacology, nutrition, emergency management, risk management and injury assessment domains will be introduced. Lab: Injury prevention principles and techniques for the application of protective taping/bracing, stretching, therapeutic exercise and testing, and environmental conditions/ illnesses.

KIN 338/L. Lower Extremity Injury Evaluation Techniques and Lab (2/1)

Prerequisite: KIN 337/L; *Corequisite:* KIN 338L. Athletic training students will learn how to assess various lower extremity musculoskeletal injuries and conditions. Injury nomenclature, the injury evaluation process and specific body parts and injuries will be covered. Lab: Athletic training students will develop proficiency in the individual lower extremity injury assessment techniques. Related topics that will be discussed will include protective, treatment, and transportation techniques.

KIN 339/L. Upper Extremity Injury Evaluation and Lab (2/1)

Prerequisite: KIN 338/L; *Corequisite:* KIN 339L. Lecture course designed to develop athletic training student's upper extremity evaluation techniques. Lab: Athletic training students will develop proficiency in the individual upper extremity injury assessment techniques.

KIN 340. Medical Documentation (1)

Prerequisites: KIN 337/L; *Corequisites:* KIN 338/L. Introduction to injury evaluation documentation via classroom instruction and observation of physicians and allied health professionals. Documentation and assessment of risk management/ injury evaluation proficiencies through practical examination. Open to ATs only.

KIN 341. Prevention and Evaluation Clinical Experience (1)

Prerequisite: KIN 338/L; *Corequisite:* KIN 333. Prevention and Lower Extremity Evaluation Clinical Experience. ATs practice, apply and synthesize knowledge and skills from the injury prevention and lower extremity injury evaluation domains with a physically active population, under the supervision of a certified athletic trainer (ATC). The required 10 hours per week assimilates ATs into the profession. Open to ATs only.

KIN 342. Rehabilitation and Evaluation Clinical Experience (1)

Prerequisite: KIN 341; *Corequisite:* KIN 334. Rehabilitation and Upper Extremity Injury Evaluation Clinical Experience. ATs practice, apply and synthesize knowledge and skills from the rehabilitation and upper extremity injury evaluation domains with a physically active population, under the supervision of a certified athletic trainer (ATC). The required 10 hours per week assimilates ATs into the profession. Open to ATs only.

KIN 345/L. Biomechanics and Lab (3/1)

Prerequisites: BIOL 211 and 212 or KIN 275. *Corequisite:* KIN 345L. Analysis of the ways in which anatomical makeup and mechanical laws govern the mechanics of human motion. Lab experiments designed to provide practical demonstration of mechanical laws and structured learning of qualitative and quantitative procedures for analyzing human motion.

KIN 346/L. Physiology of Exercise and Lab (3/1)

Prerequisite: KIN 201 or KIN 241, BIOL 281; *Corequisite:* KIN 346L. Effects of physical activity upon the human physiological processes and of the physiological aspects of skill, endurance, fatigue, training, and other phenomena related to physical performance.

KIN 347. Individual and Special Physical Education (3)

Prerequisites: KIN 345/L; KIN 346. Study of common disabilities and deviations in growth, development and motor function in students, including the role played by all physical educators in accommodating special needs students.

KIN 349. General Medical Conditions (3)

Prerequisite: KIN 337/L. Will provide students with the knowledge and skills to assess sensory and motor function related to spine injuries, handle crisis situations and to recognize systemic diseases in patients who are physically active. Pathology of the systems of the body will be covered. Open to ATs only.

KIN 370/L. Physical Education in Early Childhood Education and Lab (2/1)

Prerequisite: KIN 325. *Corequisite:* KIN 370L. Focuses on the purpose, content, procedures, materials, and equipment; and upon the relation of physical education to the total curriculum development in early childhood education. Lab: Practical lab experience in early childhood Physical Education.

KIN 371/L. Physical Education Content Development For Children and Lab (2/1)

Prerequisites: KIN 271/L. Not available for credit to students who have successfully completed KIN 470/L. Content, methodology, materials, and equipment central to the planning, implementation, and evaluation of developmental physical activity programs for children. Lab provides observation, active participation, and practical experiences in activity programs for children, with emphasis on elementary school physical education.

KIN 380/L. Perspectives of Dance and Lab (2/1)

Corequisite: KIN 380L. History, aesthetics, performance forms, musical forms, cultural and racial heritages and contemporary directions of dance in education and art. Dance as a performing art, as ritual, as social/recreational activity, and dance as a subject for scholarly investigation and analysis. Students participate in dance techniques related to content presented in the classroom. (Available for General Education, Arts and Humanities)

KIN 385. Women in Sport (3)

Survey of women's past and present involvement with sport. Examines the social, cultural and developmental implications of sport participation. (Available for General Education, Comparative Cultural Studies)

KIN 396A-Z. Experimental Topics Courses in Kinesiology (1-3)

Experimental courses in Kinesiology with course content to be determined.

KIN 402/L. Computer Applications in Kinesiology and Lab (2/1)

Prerequisite: KIN 302. *Corequisite:* KIN 402L. Significance of the computer in Kinesiology. Examination and analysis of various types of software written for exercise science, physical education and athletics. Application of computer uses for skill and fitness testing in both lab and school settings. Lab: Practical application of micro-computer programs in Kinesiology.

KIN 403. Measurement and Evaluation Lab (1)

Prerequisite: KIN 302. Application of measurement techniques for exercise sports, games and dance.

KIN 407. Sport, Culture and Society (3)

Prerequisite: KIN 306. Study of the role, meaning, and use of American sports from colonial times to the present. Examination of the effects of forces which influence sports in this society and the status of international sports including the role of U.S. Factors affecting sport at the international level and future directions.

KIN 408. The Olympic Games (3)

Prerequisite: KIN 305. Study of sport through the perspective of the ancient and modern Olympic Games from a historical and philosophical point of view.

KIN 415. Medical Aspects of Sport and Related Injuries (3)

Prerequisite: KIN 345. Review of selected medical aspects of sport taught by guest medical experts from community hospitals and private practice.

KIN 417. Theoretical and Technical Aspects of Resistance Exercise (2)

Prerequisites: KIN 345/L, KIN 346/L. *Corequisite:* KIN 417L. A course designed to prepare students to plan, develop and implement resistance training programs. Topics included will pertain to muscular strength and endurance conditioning, physiology of strength conditioning, muscular strength testing and evaluation, and organization/administration of strength training programs. Students who complete this course are prepared to sit for the Certified Strength and Conditioning Specialist examination.

KIN 417L. Theoretical and Technical Aspects of Resistance Training Laboratory (1)

Prerequisites: KIN 345/L, KIN 346/L. *Corequisite:* KIN 417. A hands-on laboratory in which students will perform various resistance training techniques which will pertain to muscular strength and endurance conditioning, physiology of strength conditioning, muscular strength testing and evaluation, and organization/administration of strength training programs. Students who complete this course are prepared to challenge the Certified Strength and Conditioning Specialist examination.

KIN 418. Advanced Classical and Contemporary Ballet Technique (3)

Prerequisite: KIN 318 or KIN 496BAL or Instructor Permission. *Recommended Preparatory:* Previous Formal Dance Training. A course for students interested in a dance specialty. Class is designed at the advanced skill level in ballet technique. May be repeated for a maximum of six units in different semesters. (Class meets for six studio hours per week)

KIN 420. Coaching Competitive Sports (3)

Prerequisite: Upper Division standing. Psychological, sociological, philosophical perspectives of coaching as these relate to motivation, discipline and interpersonal relations in competitive sports programs.

KIN 426. Choreography (2)

Prerequisites: KIN 236, KIN 316. View of dance composition including: movement sources, rhythmic spatial, and dynamic techniques of organization; thematic development; dramatic intent. Composition of solo and small group dances.

KIN 427. Dance Production (3)

Prerequisite: KIN 316. Study of techniques and materials in dance as applied to music analysis, and advanced individual and group choreography for performance.

KIN 428. Aesthetics of Human Movement (3)

Examines historical and contemporary physical activity movement forms (such as sport, dance and exercise) and the human body as aesthetic expressions and culturally symbolic representations.

KIN 429. Perceptual Motor Problems of the Atypical Student (3)

Prerequisite: KIN 329, KIN 347. Descriptive analysis of motor characteristics of the atypical student, including theories of specialized instruction, evaluation, prescribing, and implementing instruction in remedial programs. Practicum included.

KIN 436. Applied Exercise and Sports Physiology (3)

Prerequisites: KIN 346. Physiological conditioning concepts, including the effects of acute and chronic bouts of exercise training, for the enhancement of health objectives and improvement of sports performance. Regular written assignments required.

KIN 437. Athletic Training Administration (3)

Prerequisite: KIN 339/L. Athletic training students will learn techniques and strategies required to manage athletic training programs in the professional world. Professional development and acute care of injuries will also be addressed.

KIN 441. Administration and Treatment Clinical Experience (1)

Prerequisites: KIN 342; *Corequisite:* KIN 443. ATs practice, apply and synthesize knowledge and skills from the administrative, modalities and general medical domains with a physically active population, under the supervision of a certified athletic trainer (ATC). The required 20 hours per week will assimilate ATs into the profession. Open to ATs only.

KIN 442. Advanced Clinical Experience Techniques (1)

Prerequisite: KIN 441; *Corequisite:* KIN 444. ATs practice, apply and synthesize knowledge and skills from the pharmacology, acute care, domains with a physically active population, under the supervision of a certified athletic trainer (ATC). The required 15 hours per week assimilates ATs into the profession. Open to ATs only.

KIN 443. Advanced Activities Clinical Reasoning (2)

Prerequisite: KIN 334; *Corequisite:* KIN 441. ATs will develop clinical reasoning and differential diagnosis skills via case studies, while integrating knowledge and skills from injury prevention, injury evaluation, general medical, rehabilitation, modalities, and administrative domains. Open to ATs only.

KIN 444. Professional Preparation (2)

Prerequisite: KIN 443; *Corequisite:* KIN 442. ATs will prepare for the Board of Certification examination, become involved in the community and promote the athletic training profession through directed activities. Open to ATs only.

KIN 445. Quantitative Biomechanics (3)

Prerequisites: KIN 345; *MATH 104 or MATH 105.* Evaluation and interpretation of motor skill performance on the basis of applied mechanics.

KIN 446/L. Research in Exercise Physiology and Lab (2/1)

Prerequisite: KIN 346. *Corequisite:* KIN 446L. Explores advanced theory of exercise physiology, as well as concepts and techniques of research. Lab experience provides competency in the application of biomedical instrumentation to exercise physiology research.

KIN 447. Implementation and Instruction Of Adapted Physical Education Programs (3)

Prerequisite: KIN 347. Study of the principles used in assessment of students with disability and organizing, implementing, and instructing Adapted Physical Education programs.

KIN 448. Adapted Therapeutic Exercise: Assessment and Design (2)

Prerequisite: KIN 311/L. Advanced study of adapted physical activity and therapeutic exercise, with emphases on assessment, program designing and functional motor skill training. Concurrent laboratory class is designed to provide clinical experiences in Adapted Therapeutic Exercise program, working with individuals with various physical disabilities under clinical supervision at the Center of Achievement.

KIN 448L. Adapted Therapeutic Exercise: Assessment and Design Lab (1)

Prerequisite: KIN 311/L. Designed to provide clinical experiences in Adapted Therapeutic Exercise program, working with individuals with various physical disabilities under clinical supervision at the Center of Achievement. Clinical lab experience has emphases on assessment, program designing and functional motor skill training.

KIN 449. Physical Education For Students With Physical Disability (3)

Prerequisite: KIN 347. Comprehensive study of the etiology of physically disabling conditions including learning characteristics, assessment, and designing and instruction of appropriate physical education experiences. Practicum experience.

KIN 451. Adapted Aquatic Therapeutic Exercise: Assessment, Evaluation and Program Design (2)

Recommended Preparatory: KIN 311/L and KIN 313/L. *Corequisite:* 451L. This course is designed to introduce intermediate/advanced knowledge in adapted aquatic therapeutic exercise. Assessment and evaluation processes to be learned include observations, screenings and various measurement instruments for the purpose of designing exercise programs for individuals and groups with special needs.

KIN 451. L Adapted Aquatic Therapeutic Exercise: Assessment, Evaluation and Program Design Lab (1)

Recommended Preparatory: KIN 311/L and KIN 313/L. *Corequisite:* Kin 451. This course is designed to introduce intermediate/advanced knowledge in adapted aquatic therapeutic exercise. Assessment and evaluation processes to be learned include observations, screenings and various measurement instruments for the purpose of designing exercise programs for individuals and groups with special needs.

KIN 456. Adult Exercise Program Design (3)

Prerequisite: KIN 346. Review of field tests for determination of muscular strength and endurance, flexibility, body composition and aerobic endurance for normal adults. Study of the application of exercise guidelines for normal adults based upon the standards of the American Heart Association and the American College of Sports Medicine.

KIN 457/L. Therapeutic Modalities For Sports Medicine and Lab (2/1)

Prerequisite: KIN 338/L; *Corequisite:* KIN 457. Laboratory experiences designed to provide competency in the application of selected therapeutic agents.

KIN 462/L. Physical Education Content Development For Adolescents and Lab (2/1)

Prerequisites: Kin 335/L and KIN 273/L. *Corequisite:* KIN 462. Course provides physical education option students with early field and university-based experiences required to develop and apply a variety of physical education content for adolescents in team, individual and activity settings.

KIN 467/L. Therapeutic Exercise Techniques and Lab (2/1)

Prerequisite: KIN 337/L; *Corequisite:* KIN 467L. Students will develop therapeutic exercise techniques and begin to formulate rehabilitation plans. Lab: Laboratory experiences designed to provide proficiency in selecting appropriate therapeutic exercises to design rehabilitation programs for various orthopedic injuries.

KIN 470/L. Physical Education For Children and Lab (2/1)

Corequisite: KIN 470L. Not available for credit for Kinesiology majors. Focuses on the growing/moving/learning elementary age child and upon purposes, content, procedures, materials, and equipment central to elementary school Physical Education. Lab: Observation and lab experience in elementary school Physical Education.

KIN 472/L. Learner Assessment and Technology in K-12 Physical Education and Lab (2/1)

Corequisite: KIN 472. A conceptual and practical understanding of alternative and traditional assessment of student learning in school physical education. Emphasis will be on formal and informal assessment and technological strategies that enhance learning, assess performance, provide feedback and communicate progress.

KIN 476. Musculoskeletal Biomechanics and Injury (3)

Prerequisites: KIN 345 or instructor consent. Anatomical, physiological, and mechanical characteristics of human musculoskeletal tissues and their responses to mechanical loading. Detailed examination of injury mechanisms and their mechanical correlates.

KIN 479. Perception and Movement (3)

Prerequisite: KIN 325/L or KIN 329/L. Integrated approach into the nature of human movement across the life span with special emphasis on examining the relation between perception and movement as a function of the environment in which one lives.

KIN 494A-C. Academic Internship in Kinesiology (1-3)

Academic Internship course. Off-campus study and research in selected areas of Kinesiology with course content to be determined. (See subtitle in appropriate Schedule of Classes) (Credit/No Credit Only)

KIN 496A-Z. Experimental Topics Courses in Kinesiology (1-3)

Experimental courses in Kinesiology with course content to be determined.

KIN 498A-Z. Supervised Individual Projects (1-3)

Off-campus study and research in selected areas of Kinesiology with course content to be determined. (Credit/No Credit Only)

KIN 498LS. Field Experience in Physical Education for Elementary School Age Children (2)

Prerequisites: KIN 314, KIN 470/L. Restricted to Liberal Studies majors with a physical education concentration. Field experience giving the prospective elementary school teacher an opportunity to develop understanding and skills in observing children's motor skill behavior and in evaluating a comprehensive elementary school physical education program. Requires completion of 45 hours of observation/participation in assigned schools. Regular class meetings provide guidance and the opportunity to discuss the off-campus experiences. (Credit/No Credit Only)

KIN 499A-C. Independent Study (1-3)

Graduate

KIN 503. Program Planning in Physical Education (3)

Prerequisite: Graduate-standing. Study of theory of Physical Education curriculum development. Analysis of the foundations, background, philosophy and current types of physical education instructional programs at all school levels; methods of planning functional physical education curricula.

KIN 520. Seminar in Coaching the Modern Athlete (3)

Prerequisite: KIN 420. Examines different teaching and coaching personalities, styles, and communication processes as they relate to interpersonal relations, motivation, discipline, self expression, competition, cooperation, and problems associated with athletic coaching for different age groups and levels of competition.

KIN 526/L. Teaching Effectiveness in Kinesiology And Lab (2/1)

Prerequisite: KIN 329, KIN 345, KIN 346 or instructor consent. *Corequisite:* KIN 526L. Seminar that develops knowledge and skills of teaching in kinesiology based disciplines in higher education. Study of the research literature in pedagogy with a primary focus on the teaching of motor activities and lab courses. Students examine instructional strategies and develop skill in the use of systematic observation. Two hours of seminar; two hours of lab (arranged) per week.

KIN 547. Physical Education For Students with Mental Retardation and Multiple Disabilities (3)

Prerequisite: KIN 347 and KIN 429. Design and instruction of physical education programs for students with mental retardation and multiple disabilities. Includes etiology, assessment, motor learning and instructional principles, and curriculum models applicable to the design of these programs.

KIN 560. Clinical EKG and Exercise Stress Testing (3)

Prerequisites: KIN 446/L. Course in electrocardiography that includes detailed evaluation of basic EKG arrhythmias and their relationship to exercise testing and training.

KIN 566. Seminar in Aging and Environmental Aspects of Exercise (3)

Advanced study of physiological responses to exercise as a function of aging and environmental processes.

KIN 575/L. Biomechanical Analysis Techniques and Lab (2/1)

Prerequisites: KIN 345 or instructor consent. *Corequisite:* KIN 575L. Techniques for collecting and analyzing quantitative human movement data from high-speed film, video, dynamography, and electromyography, including theories supporting 3-dimensional analysis and data-smoothing methodologies. Regular writing assignments required. Lab experience provides competency in the collection and interpretation of both kinematic and kinetic data for human movement research applications.

KIN 579. Advanced Studies in human Motor Behavior (3)

Prerequisite: KIN 479 or instructor consent. In-depth investigation into the theories, principles, and research in motor development, motor learning, and motor control, with emphasis on describing and explaining changes in movement patterns across the lifespan.

KIN 600. Administration and Supervision of Physical Education (3)

Study of the history, philosophy, principles and techniques of the administration and supervision of physical education on all school and college levels.

KIN 602. Seminar in Current Issues in Kinesiology (3)

Intensive study of current issues and problems in physical education through philosophical examination and analysis of literature and research findings.

KIN 603. Seminar in Pedagogy in Kinesiology (3)

Seminar in current issues and developments in physical education pedagogy through examination and analysis of literature and research findings.

KIN 605. Research Methods and Design (3)

Prerequisite: KIN 302. Study of various types of research used in kinesiology, and techniques employed in collecting, classifying, interpreting and presenting data.

KIN 606. Seminar in Social Psychology of Sport (3)

Prerequisite: KIN 306. Advanced study of the influence of social-psychological variables as they relate to motor performance. Topics may include aggression, attitude formation and change, arousal and anxiety, achievement motivation, attribution theory, social facilitation, social reinforcement, observational learning and the competition process.

KIN 607. Seminar in Sport History (3)

Prerequisite: KIN 305. Significant trends and problems which have affected the growth and present structure of sport from the primitive through the modern period.

KIN 610. Quantitative Analysis of Research in Kinesiology (3)

Prerequisite: KIN 302. Study of advanced statistical methods for quantitative analysis of research data in kinesiology including computer analysis.

KIN 618. Seminar in Instructional Design in Physical Education (3)

Seminar that develops the knowledge and skills of instructional design as it relates to physical education. Study of the theories of curriculum, instruction, and assessment in the design cycle. Students develop multimedia and hypermedia learning materials.

KIN 626. Philosophic Development of Physical Education (3)

Prerequisite: KIN 401. Analysis and synthesis of the knowledge and interpretation of the development of philosophic schools and variants in the thought and practice of physical education.

KIN 642 A-C. Directed Research, Physiology of Exercise (1-3)

Prerequisite: KIN 446. Library and Lab research techniques employed in the assessment of human performance capacity. Emphasis primarily on physiological measurements of metabolic functions in humans.

KIN 645. Seminar in Biomechanics (3)

Prerequisite: KIN 345 or instructor consent. Analysis of current and classical research literature related to human biomechanics. Emphasis on sport and ergonomic applications.

KIN 646. Seminar in Exercise Physiology (3)

Prerequisite: KIN 446 or instructor consent. Advanced human physiological variability and potentialities and requirements for muscular activity.

KIN 647. Seminar in Adapted Physical Activity (3)

Prerequisite: KIN 605, KIN 610. An advanced study of theory and literature in adapted physical activity for individuals with disabilities. This course is designed to develop in-depth knowledge by integrating the sub-disciplines of Kinesiology as they relate to adapted physical activity on land and in the water. Specific topics include pedagogical, psycho-social, physiological and biomechanical aspects of adapted physical activity.

KIN 652. Seminar in Exercise Physiology of Skeletal Muscle (3)

Prerequisites: KIN 446/L; CHEM 235. Study of the physiological, anatomical, morphological, and biochemical adaptations of skeletal muscle to exercise training.

KIN 654. Exercise Tolerance Testing and Prescription

Prerequisites: KIN 456, KIN 446/L. Modern concepts of wellness and the application of exercise prescription principles to healthy and at risk populations in accordance with the guidelines of American College of Sports Medicine and the American Heart Association

KIN 656. Exercise Bases of Cardiac Rehabilitation (3)

Prerequisites: KIN 446. Study of exercise and related program components in rehabilitation of coronary heart disease. Emphasis on role of the exercise physiologist in the integrated clinical team approach.

KIN 679. Seminar in Motor Behavior (3)

Prerequisite: KIN 579. Study and seminar discussion of selected topics in motor behavior.

KIN 695A-Z. Experimental Topics Courses (1-3)

Prerequisite: Advisor or instructor consent. Specialized topics from a concentrated field of current interest presented at an advanced level.

KIN 696A-C. Directed Graduate Research (1-3)

Prerequisite: Classified status; graduate coordinator consent. Special graduate studies in kinesiology.

KIN 698A-C. Thesis Or Graduate Project (1-3)

Prerequisite: Classified status; thesis/project chair consent. May be repeated but not more than six units may be included among the 30 total units required for the M.S. degree.

KIN 699A-C. Independent Study (1-3)

Prerequisite: Graduate coordinator consent. Consists of a project designed to meet a highly specialized graduate need. Project selected in conference with a faculty sponsor; progress meetings held regularly until end of semester.