

**877. Seismotectonics**  
Spring. 3(3-0) GLG 479, GLG 871 or approval of department.

Analysis of the state of stress and relative motions of the lithosphere through the study of earthquakes. Focal mechanism determinations, plate kinematics, faulting source processes, earthquake prediction, quantification and earthquake locations, and relevant theory.

**892. Carbonate Petrology**  
Spring. 4(3-2) GLG 392, GLG 497.

Petrology, petrography, and geochemistry of carbonate sediments and rocks. Emphasis on diagenesis. Chemical and mineralogic trends through time. The role of diagenesis in petroleum reservoir potential.

**894. Aqueous Geochemistry**  
Fall. 3(3-0) GLG 497 or a course in physical chemistry or approval of department.

Nature and regulation of electrolytes in solution (fresh water, seawater, brine); activity, complexation, and redox effects. Trace metals in solution. Carbonate, silica, alumina systems. Chemical weathering and mobility of elements.

**898. Petrology of Mineral-Water Interactions**  
Winter. 4(3-3) GLG 462 or GLG 491; GLG 894.

Mineralogy, petrology, and geochemistry of fluid-rock reactions in the geologic cycle, including rock and mineral weathering; genesis and burial diagenesis of sediments and sedimentary rocks; and metamorphism.

**899. Master's Thesis Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**900. Special Problems**  
Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 9 credits. Approval of department.

Special problems in geology for doctoral students.

**999. Doctoral Dissertation Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**Earth Science** **ES**

**445. Field Studies**  
Fall, Winter, Spring, Summer. 1 to 9 credits. May reenroll for a maximum of 15 credits. Approval of department.  
Experience and techniques in field investigation of the near surface layers of the earth.

**446. Laboratory Investigations**  
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 15 credits. ES 445 or concurrently.  
Independent laboratory investigation of materials and phenomena obtained from field studies.

**800. Problems in Earth Science**  
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 12 credits. Approval of department.  
Independent study in topics related to earth science education.

**GERMAN**

See Linguistics and Germanic, Slavic, Asian and African Languages.

**GERMAN AND RUSSIAN**

See Linguistics and Germanic, Slavic, Asian and African Languages.

**GREEK**

See Romance and Classical Languages.

**HEALTH EDUCATION,  
COUNSELING PSYCHOLOGY  
AND HUMAN PERFORMANCE** **HCP**

**College of Education  
College of Human Medicine  
College of Osteopathic Medicine**

*Instructional Courses*

Physical Education instructional courses are offered every term to give students an opportunity to become involved in physical activities that will benefit them, not only in attaining physical well being, but in acquiring a measure of carry-over skill which will promote a healthful way of life through continued participation. The areas of selection are: HPE 104-105, Individual Sports (Golf, Bowling, etc.); HPE 106-107, Dual Sports (Tennis, Racquetball, etc.); HPE 108, Team Sports (Soccer, Softball, etc.); HPE 109, Aquatics (Beginning Swimming, Life Saving, etc.); HPE 110, Gymnastics (Floor Exercises, Apparatus, etc.); HPE 111, Dance (Social, Dancercise, etc.); HPE 211, Dance (Modern, Ballet, etc.); and HPE 270, The Healthy Lifestyle.

**104. Individual Sports I**  
Fall, Winter, Spring, Summer. 1(0-3) May reenroll for a maximum of 12 credits if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 12 credits in HCP 104 through HCP 111.

Development of sports skills and physical fitness through participation in individual sports activities.

**105. Individual Sports II**  
(HPE 105.) Fall, Winter, Spring, Summer. 1(0-3) May reenroll for a maximum of 12 credits if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 12 credits in HCP 104 through HCP 111.

Development of sports skills and physical fitness through participation in individual sports activities.

**106. Dual Sports I**  
(HPE 106.) Fall, Winter, Spring, Summer. 1(0-3) May reenroll for a maximum of 12 credits if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 12 credits in HCP 104 through HCP 111.

Development of sports skills and physical fitness through participation in dual sports activities.

**107. Dual Sports II**  
Fall, Winter, Spring, Summer. 1(0-3) May reenroll for a maximum of 12 credits if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 12 credits in HCP 104 through HCP 111.

Development of sports skills and physical fitness through participation in dual sports activities.

**108. Team Sports**  
Fall, Winter, Spring. 1(0-3) May reenroll for a maximum of 12 credits if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 12 credits in HCP 104 through HCP 111.  
Team sports skills and physical fitness through participation in group activities.

**109. Aquatics**  
Fall, Winter, Spring, Summer. 1(0-3) May reenroll for a maximum of 12 credits if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 12 credits in HCP 104 through HCP 111.  
Aquatics skills, physical fitness, and water safety.

**110. Gymnastics**  
Fall, Winter, Spring. 1(0-3) May reenroll for a maximum of 12 credits if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 12 credits in HCP 104 through HCP 111.  
Gymnastics skills and physical fitness through tumbling and apparatus.

**111. Dance**  
Fall, Winter, Spring. 1(0-3) May reenroll for a maximum of 12 credits if different activities or the same activities at higher levels are involved. Students are limited to a combined total of 12 credits in HCP 104 through HCP 111.  
Beginning and intermediate folk dance, social dance, square dance, and dancercise.

**211. Dance**  
Fall, Winter, Spring. 2(0-6) May reenroll for a maximum of 12 credits if different activities or the same activities at higher levels are involved. Approval of school for Level II and higher.  
Various graded levels of ballet, modern, and jazz dance.

**270. The Healthy Lifestyle**  
(HPE 270.) Fall, Winter, Spring. 3(2-2)  
Study and assessment of cardiovascular risk factors, habits, and physical capacities to develop a personalized lifestyle for optimal health and longevity. Individual physical regimens required as part of the course.

*Professional Courses*  
Physical Education and Exercise Science—120, 125, 130, 140, 151, 152, 153, 240, 246, 252, 253, 260, 261, 306, 310, 316, 328, 342, 343, 344, 345, 349, 350, 352, 353, 354, 357, 358, 371, 372, 390, 403, 404, 405, 406, 407, 415, 418, 424, 425, 440, 441, 442, 452, 480, 482, 490, 491, 800, 802, 804, 805, 809, 816, 817, 818, 819, 823, 824, 825, 826, 831, 832, 835, 836, 844, 846, 850, 853, 854, 860, 863, 864, 867, 869, 879, 882, 884, 885, 889, 899, 960, 984, 985, 999.  
Health Education and Human Performance—120, 125, 316, 328, 405, 407, 850, 879, 884, 885, 889, 899.

**120. Personal Health**  
Fall, Winter, Spring. 3(3-0)  
Development of understandings, attitudes and practices that are necessary for more healthful living. Provides background for teaching health to children.

**Descriptions — Health Education, Counseling Psychology and Human Performance of Courses**

**125. First Aid and Emergency Care**  
Fall, Winter, Spring, 3(3-0)

Knowledges and skills relative to: legal liability, wounds, shock, respiratory disorders and artificial respiration, cardiac disorders and cardiopulmonary resuscitation, burns, fractures, poisoning, drug overdose, emergency childbirth, transportation techniques, extrication techniques and environmental emergencies.

**130. Professional Perspectives**  
Fall, 1(0-2)

Exploration of physical education and coaching through micro-teaching and laboratory experiences concerning goals and objectives, scientific bases of coaching and teaching, and laws related to legal liability and safety.

**140. Methods and Materials of Physical Education**

(HPE 140.) Fall, Winter, Spring, 1 to 6 credits. May reenroll for a maximum of 18 credits. Each student must register for a total of 6 credits during the first fall term enrolled in the course. The number of credits in each additional enrollment must equal the number of activities to be covered during the term. Approval of school.

Skills and knowledges related to various physical activities are covered as competencies for future teaching. The abilities of each student are evaluated and individual attention is given to identified deficiencies.

**151. Outdoor Education Activities I**  
Fall, 2(1-3)

Knowledge, appreciation and skills of outdoor educational activities for seasonal use - backpacking, camping, rifle and shotgun shooting.

**152. Outdoor Education Activities II**  
Winter, 2(1-3)

Knowledge, appreciation, and skills of outdoor educational activities for seasonal use - cross country skiing, ice fishing, snowshoeing, winter camping.

**153. Outdoor Education Activities III**  
Spring, 2(1-3)

Knowledge, appreciation, and skills of outdoor educational activities for seasonal use - canoeing, casting, orienteering, and survival.

**216. Applied Human Anatomy**  
Fall, 5(4-3) HCP major or coaching minor, approval of department. Interdepartmental with and administered by the Department of Anatomy.

Structural anatomy of the various systems of the human body. Concepts of kinesiological applications.

**240. Measurement in Physical Education**  
Winter, 4(3-2) HCP 140 or concurrently; 1 year high school algebra.

Measurement and evaluation techniques for use in physical education programs.

**246. Functional Analysis of Physical Activity**  
Spring, 4(3-2) ANT 216; PSL 240; PSL 241.

An extension of PSL 241 to include information relevant to exercise and training applications. Immediate, chronic, and residual effects of physical activity regimens are presented. Exercise prescription is emphasized.

**252. Structural Analysis of Physical Activity**

Winter, Spring, 3(2-3) ANT 216.  
Techniques of the analysis of human movement based upon body structure and muscular action.

**253. Mechanical Analysis of Physical Activity**  
Fall, Spring, 4(3-2) ANT 216; one year high school algebra.

Techniques of analysis of human movement based upon mechanical principles.

**260. Developmental Analysis of Physical Activity**  
Fall, Spring, 3(3-0) HCP 252; HCP 253 or concurrently. Not open to students with credit in HCP 440 or HCP 480.

Analysis of sequential progression of fundamental motor skills - infancy through late childhood. Physical growth patterns and biological maturity as related to motor performance and social development.

**261. Psychomotor Analysis of Physical Activity**  
Fall, Spring, 3(3-0) Not open to students with credit in HCP 480.

Application of learning theories and principles to the acquisition of motor skill learning; factors affecting skill acquisition; instructional considerations.

**306. Athletic Training**  
Winter, 3(2-3) HCP 246 or concurrently; HCP 252; HCP 253 or concurrently.

Principles governing conditioning of athletes for various sports; different types of athletes; hygienic rules, study of weight sheets, massage; prevention of staleness, symptoms and treatment; work and rest; prevention and treatment of injuries.

**310. Cultural Analysis of Physical Activity**  
Fall, 3(3-0) Not open to Freshman.

Historical and sociological analysis of the development of physical education, sports, and dance, and their roles in current society.

**316. Community Health Problems**  
Winter, Spring, 3(3-0) HCP 120.

Knowledge and understanding of community health problems and needs. Special attention to various health organizations working toward solution of these problems.

**328. School Health Problems**  
Fall, Winter, 3(3-0) HCP 120.

Health problems of school-age children. Special attention to school health services and healthful school living.

**342. Techniques of Teaching Physical Activities I**

Fall, 4(1-9) HCP 140, HCP 240, HCP 246, HCP 260, HCP 261; demonstrated competence in skills and knowledge related to basketball, dance (folk, social, and square), gymnastics, softball, and track and field.

Advanced teaching techniques, analysis of fundamentals, and application of kinesiological principles in basketball, dance (folk, social, and square), gymnastics, softball, and track and field.

**343. Techniques of Teaching Physical Activities II**

Winter, 2(0-6) HCP 140, HCP 240, HCP 246, HCP 260, HCP 261; demonstrated competence in skills and knowledge related to conditioning, swimming and volleyball.

Advanced teaching techniques, analysis of fundamentals, and application of kinesiological principles in conditioning, swimming, and volleyball.

**344. Techniques of Teaching Physical Activities III**

(HPR 344., HPE 344.) Spring, 2(0-6) HCP 140, HCP 240, HCP 246, HCP 260, HCP 261; demonstrated competence in skills and knowledge related to golf, soccer and tennis.

Advanced teaching techniques, analysis of fundamentals and application of kinesiological principles in golf, soccer and tennis.

**345. Water Safety Instructor**  
Fall, Winter, Spring, 2(1-4) Senior Life Saving Certificate.

Analysis of teaching swimming with application of kinesiological principles as they apply to swimming. Students can earn Red Cross W.S.I. Certification.

**349. Baseball Coaching**  
Fall, 3(2-3) Majors, minors or approval of school.

Fundamentals and proper methods of fielding each position; qualifications for positions; teamwork and strategy; study of rules; techniques of officiating.

**350. Basketball Coaching**  
Fall, 3(2-3) Majors, minors or approval of school.

History and techniques; fundamentals; equipment; treatment of injuries; methods of training; coaching; rules and various types of offense and defense; and techniques of officiating.

**352. Football Coaching**  
Winter, 3(2-3) Majors, minors or approval of school.

Equipment; conditioning; fundamentals; individual positions; offense; defense; signals; generalship, strategy; interpretation of rules; and techniques of officiating.

**353. Golf Coaching**  
Fall of odd-numbered years, 3(2-3) Majors, minors or approval of school.

Coaching of skills and strategies, training and conditioning procedures, purchase and maintenance of equipment, rules and officiating techniques.

**354. Gymnastics Coaching**  
Spring, 3(2-3) Majors, minors or approval of school.

Teaching techniques and fundamentals of apparatus stunts, individual and doubles tumbling stunts, techniques of conducting calisthenics programs. Emphasis on building stunt routines and safety measures in gymnasium. Techniques of officiating.

**357. Tennis Coaching**  
Fall of even-numbered years, 3(2-3) Majors, minors or approval of school.

Coaching of skills and strategies, training and conditioning procedures, purchase and maintenance of equipment, rules, and officiating techniques.

**Health Education, Counseling Psychology and Human Performance — Descriptions**  
of  
Courses

- 358. Track and Field Coaching**  
Fall. 3(2-3) Majors, minors or approval of school.  
Organization and development of track and field athletics. Administration and handling of competitions, techniques of various events and methods of training and evaluating candidates. Techniques of officiating.
- 371. Advanced Basketball Coaching**  
Winter. 3(2-3) HCP 350.  
Advanced techniques in offensive and defensive strategy, equipment, training personnel, scouting, and officiating.
- 372. Advanced Football Coaching**  
Spring. 3(2-3) HCP 352.  
Analysis of best known offensive and defensive systems. Modern techniques of training, game strategy, scouting, and officiating.
- 390. Supervised Teaching—Content Areas**  
Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits. Approval of school.  
Clinical experience teaching in various content areas.
- 403. Fieldwork in Health or Physical Education**  
Fall, Winter, Spring. 1 to 8 credits. May reenroll for a maximum of 8 credits. Graduate students are limited to a combined total of 15 credits in HCP 403, HCP 879, HCP 884, HCP 885. Approval of school.  
Laboratory course in which student acts as a leader under supervision in community or school health and physical education programs.
- 404. Facility Planning and Construction**  
Winter. 4(4-0)  
Planning of athletic and physical education facilities such as gymnasiums, ice rinks, swimming pools, outdoor areas, etc., will be covered. Space utilization standards and guidelines will be presented along with the selection of equipment.
- 405. The School Health Program**  
Fall. 3(3-0) Eight credits in Health Education and Human Performance or approval of school.  
Coordination of all aspects of school health with other school programs, with outside agencies, and with community at large. Policies governing the administration of staff, facilities, and program.
- 406. Advanced Athletic Training**  
Spring. 3(2-3) HCP 306.  
Organization and administration of athletic training programs including injury prevention, management and rehabilitation. Special problems in training and game equipment and facilities are reviewed.
- 407. Safety Education**  
Fall, Winter. 3(3-0)  
Safety problems in the home, school, and community; safety education programs in the elementary, junior and senior high schools.
- 415. Curriculum and Administration in Physical Education**  
Winter, Spring. 5(4-3) T E 330 or T E 305 or concurrently; HCP 441; HCP 452; HCP 490 or concurrently; and two credits from HCP 342, HCP 343, HCP 344 or HCP 442 or concurrently.  
Administrative principles and the development of the physical education curriculum in schools.
- 418. Intramural Sports**  
Winter. 3(3-0) Juniors.  
Intramural sports administration, purpose, scheduling, publicity, programs of activity, scoring, rules, awards, and reports.
- 424. Selected Topics**  
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 9 credits. Approval of school.  
Selected professional problems of teachers will be dealt with on an individual and on a group basis. Each student will be expected to select one or more problems for study.
- 425. Proseminar**  
Spring. 2(2-0) HCP 342; HCP 490 or concurrently; HCP 491 or concurrently.  
Philosophical positions, method and function applied to professional practice in the field of physical education.
- 440. Developmental Basis of Motor Skills**  
Fall, Winter, Spring. 4(3-3) Not open to Physical Education and Exercise Science majors, coaching minors or students with credit in HCP 260 or HCP 480.  
Emphasizes the developmental sequence of fundamental motor skills and the influence of physical growth and biological maturation on motor development.
- 441. Physical Education in Elementary Schools I**  
Fall. 2(0-6) HCP 260 or HCP 440.  
Physical education curriculum and instruction in skills, games, and rhythms for the early elementary school child. Selection and presentation of activities and development of activity sequences.
- 442. Physical Education in Elementary Schools II**  
Spring. 2(1-3) HCP 260 or HCP 440.  
Physical education curriculum and instruction in low organized and lead-up activities to team sports for late elementary school children. Selection and presentation of activities and development of activity sequences.
- 452. Adapted Physical Education**  
Fall, Spring. 3(2-2) HCP 260 or HCP 440; T E 322 or T E 305 or concurrently.  
Principles and procedures in selecting and sequencing learning activities of school age children with handicapped conditions that require special physical education programs or adapted activities in the regular program.
- 453. Practicum in Adapted Physical Education**  
Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 6 credits. HCP 452 or concurrently; or approval of school.  
Supervised practice in teaching physical education and/or coaching sport for persons with disabilities.
- 480. Principles of Coaching**  
Spring. 5(5-0) HCP 246 or concurrently; HCP 252 or concurrently; HCP 253 or concurrently. Not open to Physical Education and Exercise Science majors or to students with credit in HCP 260, HCP 261 or HCP 440.  
Coach and athlete in the areas of administration, growth and development, motor skill acquisition, philosophy, psychology and sociology.
- 482. Topics in Physical Education and Exercise Science (MTC)**  
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 9 credits.  
Seminars in various fields of emphasis in physical education and exercise science.
- 490. Cadet Teaching—Motor Development**  
Fall, Winter, Spring, Summer. 1(0-3) HCP 260; HCP 441 or HCP 440.  
Provides a laboratory experience in teaching fundamental motor skills to children of early childhood, elementary and middle school ages. Emphasis is placed on the sequential order of skill progressions.
- 491. Cadet Teaching—Remedial Motor**  
Fall, Winter, Spring, Summer. 1(0-3) HCP 260; HCP 441 or HCP 440.  
A practical teaching experience involving the assessment of gross motor dysfunction and development of prescriptive programs in a laboratory instructional situation.
- 800. Seminar in Health and Physical Education**  
Winter, Spring. 1(1-0) May reenroll for a maximum of 6 credits. HCP 802.  
Research seminar for master's and doctoral candidates.
- 802. Research Techniques**  
Fall, Summer. 5(3-6) Approval of school.  
Introduction to research methods used in health, and physical education.
- 804. Evaluation in Physical Education I**  
Winter. 3(3-0) HCP 802 or approval of school.  
Application of elementary inferential statistics to research in physical education.
- 805. Evaluation in Physical Education II**  
Spring. 5(3-6) HCP 804 or approval of school.  
Application of advanced inferential statistics to research problems in physical education with emphasis on computer usage.
- 809. Analysis of Professional Literature**  
Fall, Spring. 2(2-0) Approval of school.  
Outstanding professional literature in health and physical education and in the related fields of physiology, psychology, sociology and others. Critical analysis of selected studies.
- 816. Motor Development**  
Fall. 3(3-0) Approval of school.  
Principles of motor development, with implications for learning gross motor skills. Consideration of the factors associated with individual differences in attaining motor proficiency during childhood and adolescence.
- 817. Motor Skill Acquisition in Early Childhood**  
Winter. 3(3-0) HCP 440 or HCP 816.  
Reflexes, reactions and patterns of motor behavior in children between the ages of two and seven years. Experiences include development of curricula in motor skills for children of specific ages.
- 818. Compensatory and Remedial Motor Education**  
Spring. 3(3-0) Approval of school.  
Identification and education of children with gross motor dysfunction. Screening for motor deficits, diagnostic testing, prescriptive program planning and evaluation of existing programs.

**Descriptions — Health Education, Counseling Psychology and Human Performance of Courses**

**819. Motor Skill Learning**

Winter. 3(3-0) Approval of school.

Research and theory of learning and performance applied to gross motor skills. Emphasis on the neuromuscular and cybernetic bases of motor skill acquisition.

**823. Laboratory Orientation**

Fall. 2(0-6) Approval of school.

Laboratory techniques with emphasis on maintenance, calibration and operation of laboratory instruments.

**824. Somatic Foundations of Physical Activity I**

Fall. 3(3-0) Approval of school.

Immediate and chronic physiological effects of physical exercise.

**825. Somatic Foundations of Physical Activity II**

Winter. 3(3-0) HCP 824.

Continuation of HCP 824.

**826. Somatic Foundations of Physical Activity Laboratory**

Spring. 2(1-3) HCP 825.

Laboratory course based on the subject matter of HCP 824 and HCP 825.

**831. Social Aspects of Sport Participation**

Spring of even-numbered years. 3(3-0) Approval of school.

The role of sport in the lives of its participants from a sociological perspective. The major topics of discussion will focus on the female athlete, the male athlete, and the coach.

**832. Sport as a Social Institution**

Spring of odd-numbered years. 3(3-0) Approval of school.

Sport as an institution from a sociological perspective at the macro level. The focus will be on the interrelationships between sport and such social systems as politics, economics, entertainment and religion.

**835. Motivational Bases in Sport Psychology**

Fall. 3(3-0). Approval of school.

Sport psychological research findings in the areas of motivation, feedback, reinforcement, expectations and modeling.

**836. Social Processes in Sport Psychology**

Winter. 3(3-0) Approval of school.

Social psychology of sport. Research findings in the areas of aggression, attitude development and personality. Moral development and sports socialization.

**840A. Counseling Practice**

Fall, Summer. 3(3-0) Admission to M.A. Counseling Program. Interdepartmental with and administered by the Department of Counseling, Educational Psychology and Special Education.

The practice of counseling and guidance in schools, community colleges, and rehabilitation agencies.

**840C. The Guidance Information Service**

Winter. 3(3-0) CEP 840A, CEP 840B. Interdepartmental with and administered by the Department of Counseling, Educational Psychology and Special Education.

The use of occupational, educational and social information in counseling interviews and in guidance programs.

**840F. Counseling Practicum I**

Fall, Winter, Spring. 6(4-8) CEP 840C, CEP 840D. Interdepartmental with and administered by the Department of Counseling, Educational Psychology and Special Education. Supervised counseling experienced in selected schools and agencies followed by analysis and critique of these experiences through group and individual consultation with instructor.

**844. Physical Education for Students with Mental, Emotional, or Learning Disabilities**

Winter. 3(3-0) HCP 452, CEP 460 or approval of school.

Research findings, curriculum development and instructional procedures in physical education for students with mental, emotional, or learning disabilities.

Approved through Fall 1989.

**845A. Curriculum and Instruction in Adapted Physical Education**

Spring. 3(3-0) HCP 863 or approval of school.

Curriculum design and effective teaching practices in physical education for students with disabilities.

**845B. Research on Sport for Disabled Athletes**

Winter. 3(3-0) Approval of school.

Research in exercise physiology, sport biomechanics, sport psychology, sport sociology, motor development, and motor learning related to the performance capabilities of disabled athletes.

**845C. Practicum in Adapted Physical Activity**

Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 6 credits. HCP 845A or concurrently or approval of school.

Supervised practice in teaching or coaching physical education or sport skills to persons with disabilities.

**846. Physical Education for Students with Physical or Sensory Disabilities**

Spring. 3(3-0) HCP 452, CEP 460 or approval of school.

Research findings, curriculum development, and instructional procedures in physical education for students with physical and sensory disabilities.

Approved through Fall 1989.

**850. Individual Study**

Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 6 credits. Approval of school.

**853. Biomechanical Analysis of Physical Activity I**

Winter. 3(2-2) Approval of school.

Study of mechanical and anatomical characteristics of physical skills through the use of such investigative and research tools as visual observation, still photography, stroboscopic photography and high speed cinematography.

**854. Biomechanical Analysis of Physical Activity II**

Spring. 3(2-2) HCP 853 or approval of school.

Study of mechanical and anatomical characteristics of physical skills through the use of such investigative and research tools as electromyography, electrogoniometry, force recording devices and multiple instrumentation systems.

**860. Administration of Physical Education in Schools and Colleges**

Fall. 3(3-0) Approval of school.

Designed to familiarize majors in this and other areas with administrative problems incident to high school and college programs of physical education for men and women.

**862. Training and Consultation Techniques**

Fall. 3(3-0) Approval of school.

Techniques in staff training, workshops and consultation, assessment of training needs, preparation of materials, delivery and evaluation.

**863. Systems Approach to Program Planning**

Winter. 3(3-0) HCP 862 or approval of school.

Principles and practices related to systems design, accountability models, and innovative techniques in curriculum and program planning.

**864. Evaluation of Systems Designed Programs**

Spring. 3(3-0) HCP 863 or approval of school.

Content and design of evaluation plans for programs using systems approaches. Consideration of psychometric tools; basic research, evaluation and measurement techniques.

**867. The Curriculum in Physical Education**

Spring. 3(3-0) Approval of school.

Principles and content of physical education curricula in schools and colleges.

**869. Supervision of Physical Education**

Winter. 3(3-0) Approval of school.

Techniques of supervision and their application in improving the teacher-pupil learning situations. Problems met by supervisors in elementary and secondary schools with class participation in solving them.

**879. Internship**

Fall, Winter, Spring, Summer. 3 to 9 credits. May reenroll for a maximum of 9 credits. Must take a total of 6 to 9 credits to receive a grade in this course. Students are limited to a combined total of 15 credits in HCP 403, HCP 879, HCP 884, HCP 885. Approval of school.

Internship experience under the guidance and supervision of MSU faculty and internship consultants. Involves a variety of activities.

**881. Topics in Health and Rehabilitation Counseling (MTC)**

Fall, Winter, Spring, Summer. 3 credits. May reenroll for a maximum of 18 credits if different topics are taken. Graduate students.

Seminar in current topics in the fields of health psychology, counseling psychology and rehabilitation counseling.

**882. Topical Seminars in Physical Education and Exercise Science (MTC)**

Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll for a maximum of 15 credits if different topics are taken. Approval of school.

Seminars in the various fields of emphasis in physical education and exercise science.

**883. Topical Seminars in Health Education and Human Performance (MTC)**  
Fall, Winter, Spring, Summer. 2 to 9 credits. May reenroll for a maximum of 18 credits if different topics are taken. Approval of school.

Seminars in various fields of emphasis in health education and human performance.

**884. Directed Laboratory Experience**  
Fall, Winter, Spring. 2 to 5 credits. May reenroll for a maximum of 9 credits. Students are limited to a combined total of 15 credits in HCP 403, HCP 879, HCP 884 and HCP 885. Approval of school.

Supervised laboratory experience for master's candidates.

**885. Directed Field Experience**  
Fall, Winter, Spring. 3 to 9 credits. May reenroll for a maximum of 9 credits. Students are limited to a combined total of 15 credits in HCP 403, HCP 879, HCP 884, HCP 885. Approval of school.

Supervised field experience in schools and other institutions for master's candidates.

**889. Project in Health Education, Counseling Psychology and Human Performance**  
Fall, Winter, Spring, Summer. 2 to 6 credits. May reenroll for a maximum of 6 credits. Must take a total of 6 credits to receive a grade in this course. Approval of school.

Project experience under the guidance and supervision of MSU faculty.

**899. Master's Thesis Research**  
Fall, Winter, Spring, Summer. 1 to 9 credits. May reenroll for a maximum of 9 credits. Must take a total of 9 credits to receive a grade in this course. HCP 804 or concurrently; approval of school.

**949C. Physiological Measurement in Counseling Psychology**  
Spring. 3(2-2) HCP 450, approval of school.  
Physiological measurement in counseling psychology treatment, training, and research. Approved through Fall 1989.

**950. Interpersonal Process Recall**  
Fall. 3(3-2) Doctoral candidates in counseling psychology or approval of instructor. A structured training model designed to teach facilitation of interpersonal communication through learning communication skills, examining interpersonal stress, and self-study of one's own videorecorded behavior. Theory and research issues will be presented. Approved through Fall 1989.

**960. Individual Study**  
(HPR 950, HPE 950.) Fall, Winter, Spring, Summer. 2 to 12 credits. May reenroll for a maximum of 12 credits. Doctoral candidates; approval of school.

**984. Directed Laboratory Experience**  
Fall, Winter, Spring. 2 to 15 credits. May reenroll for a maximum of 15 credits. Doctoral candidates; approval of school.  
Supervised laboratory experience for doctoral candidates.

**985. Directed Field Experience**  
Fall, Winter, Spring. 3 to 15 credits. May reenroll for a maximum of 15 credits. Doctoral candidates; approval of school.  
Supervised field experience in schools and other institutions for doctoral candidates.

**999. Doctoral Dissertation Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of school.

## HEBREW

See Linguistics and Germanic, Slavic, Asian and African Languages.

## HISTORY

### College of Arts and Letters

**101. The African Experience (A)**  
Fall. 4(4-0)  
Main historical dimensions of the political, economic and cultural development of Africa. Emphasis on recent period, interdependence, and cultural values.

**102. The Latin American Experience (A)**  
Winter. 4(4-0)  
Latin America, past and present: the Indian cultures; political systems; problems of underdevelopment; foreign domination; art, ideology and regional identity.

**103. The East Asian Experience in the Modern World (A)**  
Spring. 4(4-0)  
Complexities and global implications of East Asia; an interdisciplinary approach to traditional civilizations of China and Japan; their world views, values and institutions and their transformation under the Western impact.

**111. The Roots of European History (A)**  
Fall, Winter, Spring, Summer. 4(4-0)  
The ancient world and early medieval Europe: origins and development of civilization in the ancient Near East; Greek and Roman civilizations; the collapse of Rome; the early Middle Ages.

**112. Maturing of European Civilization (A)**  
Fall, Winter, Spring, Summer. 4(4-0)  
Europe from the twelfth to the eighteenth century; religion, science, statecraft, and society in their medieval synthesis, early modern expansion and renewal, and self-modernization in the Enlightenment.

**113. Europe in the Modern Age (A)**  
Fall, Winter, Spring, Summer. 4(4-0)  
From the French Revolution to the present: industrial and democratic revolutions; nationalism, liberalism, and socialism; the rise of mass society; imperialism, war and communism; totalitarianism; the warning of European supremacy.

**121. Union to Disunion: America, The First Hundred Years (A)**  
Fall, Winter, Spring, Summer. 4(4-0)  
Inquiry into the major problems confronting the new nation and their consequences for American development; establishment of republican government; economic growth, westward expansion, reform movements, slavery, Civil War.

**122. History of the United States: The Nation State (A)**  
Fall, Winter, Spring, Summer. 4(4-0)  
Nature of American history since 1877. Through a combination of readings, lectures and discussions, the student derives some understanding of both facts and meaning of history, and methodology of the historian.

**201. Introduction to the Study of History**  
Fall, Winter, Spring. 4(4-0). History majors or approval of department.  
Intensive study of a major historian's work. Familiarize students with various historical methodologies and the art of reading history. Introduction to writing essays stressing both analysis and synthesis.

**231. American Biography**  
Winter of even-numbered years. 4(4-0)  
Lives of interesting individuals who have helped shape the course of American history along with discussion of the nature, method, problems and impact of the biographical approach to history.

**233. The United States in World Affairs**  
Winter. 4(4-0) Not open to history majors.  
American foreign relations during and after World War II, recent relations with Asian countries, West Germany, the Soviet Union, and America's reaction to the Middle East question.

**235. Military History of the United States**  
Fall. 3(3-0)  
Evolution of United States military policy with emphasis on the causes and conduct of wars, the democratization of war, the implications of the industrial, managerial, and scientific revolutions and the quest for peace.

**242. Economic and Business History**  
Fall, Winter, Spring. 3(3-0)  
Survey of major changes in the American economy since the middle of the 19th century, including transportation, industry, labor, finance, and marketing. Role of private business and government in economic change.

**249. American Urban History**  
Fall. 4(3-0) Interdepartmental with and administered by James Madison College.  
Evolution of American cities from the industrial revolution. Emphasis on process of urbanization, and on the social, economic, and political aspects of American urban history.

**IDC. Introduction to Contemporary China**  
For course description, see Interdisciplinary Courses.

**IDC. Contemporary Japan**  
For course description, see Interdisciplinary Courses.