

Movement Science, Sport, and Leisure Studies

The Department of Movement Science, Sport, and Leisure Studies offers a Bachelor of Science degree in Movement Science and a Bachelor of Science degree in Athletic Training. The department also offers a diverse selection of elective courses (theory and activity) designed to meet the needs and interests of today's students.

The foundation of the Movement Science major prepares the students to pursue several career alternatives and/or graduate study. In addition to the twenty-nine (29) semester hours of the major core, Movement Science majors are required to complete a concentration in either Sports Medicine, Exercise Science, Physical Education Teaching Licensure, or Wilderness Leadership. All concentrations require that the student satisfactorily complete at least 21 credits of specified courses and an internship. In lieu of an internship, students may select two upper level courses offered by the department. Only those students electing to do an internship/practicum/clinical experience will be recognized for the concentration on their transcript.

The Athletic Training Education Program (ATEP) at Westfield State University is an undergraduate degree program within the Department of Movement Science, Sport and Leisure Studies. The ATEP is nationally accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Upon successful completion of the program the student will have met the academic and clinical requirements necessary to sit for the Board of Certification (BOC) examination. WSU's program is comprehensive and academically challenging. The ATEP has competitive enrollment and specific requirements for admission and retention.

In addition to aligning with the University mission, the Movement Science Department and Athletic Training Education Program are well positioned to prepare students for the changing healthcare environment. A gradual shift from an illness to a wellness model of health care is drawing long overdue attention to movement related professions. The joint American College of Sports Medicine and American Medical Association initiative *Exercise is Medicine* is laying important groundwork for career opportunities. The *Exercise is Medicine* initiative is designed to *make physical activity and exercise a part of the disease prevention and treatment paradigm in the United States* (www.exerciseismedicine.org). A related, National Athletic Trainers' Association legislative initiative, *Athletic Trainers' Equal Access to Medicare Act of 2009 (ATEAM)*, is a national bill before the senate and House of Representatives that will include athletic trainers as a referral option for physical medicine and rehabilitation services under Medicare Part B. After successfully completing one of four concentrations, Sports Medicine, Health Fitness, Physical Education Teaching Certification, or Wilderness Leadership, our graduates accept positions in a wide variety of graduate programs: exercise science, physical therapy, occupational therapy, physician assistant, athletic training, public health, nursing, and education to name a few. Our graduates work in a wide variety of settings: physical education (elementary and secondary), cardiac rehabilitation, echocardiogram technology, physical therapy, occupational therapy, physician assistant, personal training, strength and conditioning for professional sports, and corporate fitness.

The Movement Science Department also offers a minor in Wilderness Leadership and an interdisciplinary minor in Commercial Recreation and Tourism with the departments of Economics and Management and Geography and Regional Planning.

REQUIREMENTS FOR THE MOVEMENT SCIENCE MAJOR

All Movement Science Majors must complete the twenty-nine (29) credits of courses specified below and one concentration offered by the department. A minimum grade point average of 2.5 in the Major Core Classes is required to be eligible to graduate with a degree in Movement Science.

MAJOR CORE CLASSES

MOVP 0100 Introduction to Exercise Science	(3)
MOVP 0105 Foundations of Movement Science I	(3)
MOVP 0106 Foundations of Movement Science II	(3)
BIOL 0237 Anatomy and Physiology I	(4)
BIOL 0239 Anatomy and Physiology II	(4)
MOVP 0202 Introduction to Motor Learning	(3)
MOVP 0203 Motor Development and Behavior	(3)
MOVP 0204 Kinesiology	(3)
MOVP 0205 Physiology of Exercise	(3)

In order to progress through the Movement Science major, students must meet the academic and professional development criteria necessary to earn intermediate and advanced standing in the department as outlined in the Professional Development section below.

MOVEMENT SCIENCE MAJOR CONCENTRATIONS

EXERCISE SCIENCE CONCENTRATION

The Exercise Science Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Commission on the Accreditation of the Exercise Sciences (CoAES). Upon successful completion of the program the student will have met the academic requirements necessary to sit for an examination for a nationally recognized certification in exercise and sport science.

Exercise Science Concentration Entrance (Acceptance) Requirements
All students in the Department of Movement Science, Sport and Leisure Studies may apply to the Exercise Science Program (ESP). Students will graduate with a Bachelor of Science degree in Movement Science with a concentration in Exercise Science. Only students formally accepted into the Exercise Science Program may gain a complete clinical experience in the Exercise Science setting by completing the Internship in Exercise Science Capstone course. The number of students accepted each semester will vary in accordance with retention and graduation rates. There is a minimum 4-semester commitment, and, therefore, students are encouraged to apply during their second semester sophomore year. Admission to the program is competitive, and based on the following criteria.

Admissions Minimal Requirements

Students interested in applying for entrance to the Exercise Science Program must meet the following prerequisite requirements:

1. Students must have completed or in the process of completing the Intermediate Standing Admissions process (details of Intermediate Standing process can be found in MSSLS Department Program Manual)
2. Completion or enrollment in MOVP 0101 (Clinical Experiences in Exercise Science I)
3. Minimum overall GPA of 2.7

Application materials may be found in the Exercise Science Program Manual.

Transfer students will be considered on an individual basis based on University policies explained in the Admission section of this Bulletin, in addition to courses and clinical experiences completed at the previous institution. Any courses considered equivalent to the required courses must be presented to the Department Chair and/or Program Director(s) for approval prior to application. A copy of the course description, course syllabus and confirmation of grade/course completion is required for review.

Once accepted into the Exercise Science Program, the student will be required to meet the academic and clinical requirements of the program as outlined in the Exercise Science Program Manual. Students must be granted Advanced Standing and complete an internship in order to graduate from the Exercise Science Program.

The following is a listing of the Exercise Science concentration course requirements beyond those of the Movement Science core:

Required Course List:

MOVP 0101 Clinical Experiences in Exercise Science I	(1+1)*
MOVP 0107 Exercise Injuries: Prevention and Treatment	(3)
MOVP 0183 Relaxation Techniques	(1)
MOVP 0201 Clinical Experiences in Exercise Science II	(1+1)* †
MOVP 0212 Concepts of Nutrition	(3)
MOVP 0255 Functional Anatomy	(3)
MOVP 0292 Principles of Group Exercise Programming	(3)
MOVP 0305 Principles of Strength and Conditioning	(3)
MOVP 0310 Gerokinesiology	(3)
MOVP 0320 Fitness Assessment and Exercise Prescription	(3)
MOVP 0321 Supervising Sports/Fitness Programs	(3)
MOVP 0328 Fitness and Rehabilitation for Special Populations	(3)
MOVP 0390 Senior Seminar in Exercise Science	(1)
MOVP 0397 Exercise Science Capstone Internship	(4-12)
Choice of 1 of the following 1 credit courses:	(1)
MOVP 0113 Fitness for Adults: Walking	(1)
MOVP 0109 Aerobics	(1)
MOVP 0118 Step Aerobics	(1)
MOVP 0162 Strength Training and Conditioning	(1)
MOVP 0329 Basic EKG and Stress Testing	(1)
Choice of 1 of the following 3 credit courses:	(3)
MOVP 0332 Nutrition and Human Performance	(3)
MOVP 0335 Research Methods in Physical Activity and Health	(3)
MOVP 0331 Sport and Exercise Psychology	(3)
MOVP 0330 Sport Promotions	(3)
MOVP 0326 Children in Competitive Sports	(3)

*Must be repeated once and may be repeated more than once, but no more than 2 credits may be applied to the major.

† Requires admission into the Exercise Science Program and a minimum 2.7 overall GPA

Additional information about the Exercise Science Program may be found in the Exercise Science Program Manual.

SPORTS MEDICINE CONCENTRATION

The Sports Medicine option is a pre-professional preparation option which completes requirements for a movement science major, however, further study will be necessary in order to obtain credentialing in an allied health profession.

Required Course List:

MOVP 0107 Exercise Injuries: Prevention and Treatment	(3)
MOVP 0212 Concepts of Nutrition	(3)
MOVP 0234 Evaluation/ Upper Extremity Injuries	(3)
MOVP 0235 Evaluation/ Lower Extremity Injuries	(3)
MOVP 0319 General Medical Aspects of Physical Activity	(3)
MOVP 0323 Therapeutic Modalities	(3)
MOVP 0328 Fitness and Rehab for Spec Populations	(3)

Also required is:

MOVP 0395 Internship in Sports Medicine or Two upper level courses	(6)
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In addition, students pursuing a career in an allied health field must meet prerequisite standards for graduate level education in that field (i.e., PT, OT, PA, etc.). Information on these requirements may be obtained from the Movement Science Department Office.

TEACHER OF PHYSICAL EDUCATION (ELEMENTARY OR SECONDARY) CONCENTRATION

The Westfield State University program for licensure for teachers of Physical Education has received "national recognition" from the National Association for Sport and Physical Education (NASPE) and the National Council for Accreditation of Teacher Education (NCATE).

Required Course List:

MOVP 0103 Introduction to Teaching Physical Education	(1)
MOVP 0260 (MOVP 0261) Analysis of Teaching Selected P.E. Skills I: Elementary (Secondary)	(4)
MOVP 0262 Analysis of Teaching P.E. Skills II	(2)
MOVP 0302 Measurement and Evaluation in P.E.	(3)
MOVP 0311 Adaptive Physical Education	(3)
MOVP 0313 (MOVP 0314) Physical Education Teaching Methodology: Elementary (Secondary)	(3)
MOVP 0316 Curriculum Planning and Implementation in P.E.	(2)
MOVP 0348 (0350) Practicum I: Elem(Secondary) *	(6)
MOVP 0349 (0352) Practicum II: Elem (Secondary)*	(6)
MOVP 0355 Practicum Seminar*	(3)
EDUC 0380 Multicultural Education	(3)

Students may substitute 6 credits of upper-level courses in the major for the practica and practicum seminar.

NOTE: Students must satisfy the following requirements prior to practicum placement:

1. A 2.7 average in English Composition I and II
2. A 2.8 overall GPA (including transfer work)
3. MSSLS advanced standing status and a minimum grade of 2.7 in MOVP 0313 or MOVP 0314
4. A passing grade on all required Massachusetts Tests for Educator Licensure.

Student progress toward meeting Advanced Standing in Teacher Education is monitored at the end of the sophomore year (57 credits). Please see section on Licensure for Teacher Education. Student teacher placements are limited to within a 30-mile radius of the campus.

WILDERNESS LEADERSHIP CONCENTRATION

Wilderness Leadership administers an experiential curriculum of traditional and alternative teaching methods both in the classroom and in the field that meets the needs of the individual student's technical and theoretical foundation of becoming a professional in the field of outdoor adventure leadership. This concentration prepares students for careers in outdoor education and to lead field trips and adventure trips within the leisure industry.

Required Course List:

MOVP 0199 Wilderness Experiences	(3)
MOVP 0245 Adventure Challenge Instructor	(3)
MOVP 0250 Techniques of Wilderness Leadership	(3)
MOVP 0190 First Aid and Emergency Care	(1)

One of the following:

BIOL 0128 Biological Concepts	(4)
ENVS 0106 Introduction to Environmental Analysis	(3)

One of the following:

MOVP 0309 Outdoor Recreation	(3)
EDUC 0312 Outdoor Education	(3)

As well as three activities' courses from the following list: (3-5)

MOVP 0137 Skin and Scuba	(1)
MOVP 0138 Boating and Canoeing	(1)
MOVP 0139 Kayaking	(1)
MOVP 0154 Down Hill Skiing	(1)
MOVP 0155 Ski Touring and Snowshoeing	(1)
MOVP 0167 Camping Skills	(1)
MOVP 0172 Orienteering	(1)
MOVP 0173 Initiative Games and Ropes	(1)
MOVP 0180 Rock Climbing	(1)
MOVP 0182 Life Guard Training	(2)
MOVP 0184 Water Safety Instructor	(2)

Also required is:

MOVP 0398 Internship in Wilderness Leadership or Two upper-level courses in major	(6)
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In consultation with advisor, students may want to pursue a minor in Biology, Business, or Environmental Science.

REQUIREMENTS FOR THE ATHLETIC TRAINING MAJOR - 69 CREDITS

Athletic training is practiced by athletic trainers, health care professionals who collaborate with physicians to optimize activity and participation of patients and clients. Athletic training encompasses the prevention, diagnosis, and intervention of emergency, acute, and chronic medical conditions involving impairment, functional limitations, and disabilities. The athletic trainer's professional preparation is based on the development of specified educational competencies and clinical proficiencies through a combination of formal classroom and clinical instruction and clinical experience. Athletic trainers' work settings can include high schools, colleges, universities, professional sports teams, hospitals, rehabilitation clinics, physicians' offices, corporate and industrial settings, military and law enforcement, and the performing arts (NATA, 2008)

ATEP ENTRANCE (ACCEPTANCE) REQUIREMENTS

A student wishing to enter the Athletic Training Education Program must be enrolled in the Department of Movement Science, Sport and Leisure Studies, and must apply for entrance into the Program. Only students formally accepted into the ATEP may serve as athletic training students, gaining clinical experience in an athletic training setting. The number of students accepted each year will vary in accordance with retention and graduation rates. The ATEP is a minimum 6-semester commitment and, therefore, students are encouraged to apply during their first year. On-campus and off-campus clinical experience is required in addition to the academic requirements. Admission to the Program is competitive and based on the following criteria.

APPLICATION ELIGIBILITY REQUIREMENTS

Students interested in applying for entrance to the ATEP must meet the following prerequisite requirements:

1. Minimum cumulative GPA of 2.0.
2. Successful completion of 14 academic credit hours.
3. Completion of MOVP 0102 (Introduction to Athletic Training) and BIOL 0237 (Human Anatomy and Physiology I) with a minimum combined GPA of 2.5.
4. Documentation of a current physical examination, including immunization documentation, on file in WSU Health Services.

APPLICATION MATERIALS

Students meeting the eligibility requirements must submit the following materials to be considered for admittance into the ATEP. The application, available from the program Director, contains the information and forms necessary for application.

1. Completion of a program application.*
2. Completion of 35 hours of active observation in the WSU ATEP, including 20 hours in the athletic training room and 15 hours at athletic practices or competitions.
3. Submit a typed journal documenting your observations in the athletic training room and at athletic practices/events.
4. Submit three favorable recommendations.
5. Attendance at a minimum of four WSU ATEP approved colloquia.
6. Copy of First Aid and CPR Certification.
7. Completion of a Medical History questionnaire, job demands analysis, and musculoskeletal exam.
8. Submit a signed copy of the Technical Standards for Admission Form.**
9. Submit a signed copy of the Athletic Training Student Agreement Form
10. Admission interview. Once the application materials have been completed and are on file in the Program Director's office, an admission interview with the ATEP Student Selection Committee will be arranged. This committee typically consists of the three members of the program faculty and the three members of the clinical staff. Successful completion of the interview requires a mean score of 2.5.

* The deadline for submission of application materials is April 15th for spring applicants and November 15th for fall applicants. The deadline may be extended for transfer students. All application materials will be kept on file in the student's portfolio in the program Director's office.

** Candidates for admission to the ATEP are required to verify they understand and meet the technical standards of the program and its accrediting agency. The technical standards for admission are published in the ATEP Student Manual.

Transfer students will be considered on an individual basis based on college policies explained in the Admission section of the University Bulletin, in addition to courses, clinical education/ experience, and competencies/clinical proficiencies completed at the previous institution. Any courses considered equivalents to the required courses must be presented to the Department chair and/or Program Director for approval prior to application. Bring a copy of the course description, the course syllabus, and proof of your completion with grade for review.

MAJOR CORE CLASSES - 29 CREDITS

MOVP 0100 Introduction to Exercise Science	(3)
MOVP 0105 Foundations of Movement Science I	(3)
MOVP 0106 Foundations of Movement Science II	(3)
BIOL 0237 Anatomy and Physiology I	(4)
BIOL 0239 Anatomy and Physiology II	(4)
MOVP 0202 Introduction to Motor Learning	(3)
MOVP 0203 Motor Development and Behavior	(3)
MOVP 0204 Kinesiology	(3)
MOVP 0205 Physiology of Exercise	(3)

ATHLETIC TRAINING CLASSES - 40 CREDITS

MOVP 0102 Intro to Athletic Training	(3)
MOVP 0190 First Aid and Emergency Care *	(1)
MOVP 0191 Athletic Training Skills **	(1+1)
MOVP 0212 Concepts of Nutrition	(3)
MOVP 0234 Evaluation of Upper Extremity Injuries	(3)
MOVP 0235 Evaluation of Lower Extremity Injuries	(3)
MOVP 0237 Athletic Training Clinical Experience **	(2+2)
MOVP 0319 General Medical Aspects of Physical Activity	(3)
MOVP 0321 Supervising Sports/Fitness Programs	(3)
MOVP 0323 Therapeutic Modalities	(3)
MOVP 0327 Therapeutic Exercise	(3)
MOVP 0328 Fitness and Rehab for Spec Populations	(3)
MOVP 0337 Athletic Training Research and Clinical Decision Making **^	(3+3)

* The Emergency Medical Technician course, MOVP 0211, may be taken in place of MOVP 0190.

** These courses must be taken for two semesters.

^ Advanced Standing is required for MOVP 0337, Athletic Training Research and Clinical Decision Making. Additional information regarding the Clinical Experience may be obtained from the Clinical Education Manual available from the ATEP Clinical Coordinator.

PROGRESSION THROUGH THE PROGRAM

Once accepted into the Athletic Training Education Program, the student will be required to meet the major's clinical requirements and the academic and professional development criteria necessary to earn intermediate and advanced standing in the department (outlined below). Progression through the Athletic Training Education program will require the student to complete 3 levels of preparation, each requiring an increasing level of proficiency and responsibility. Specific requirements for progression to each level of the program are published in the ATEP Student Manual.

PROFESSIONAL DEVELOPMENT PROCEDURES

In order to progress through the Movement Science and Athletic Training majors, students must meet the academic and professional development criteria necessary to earn intermediate and advanced standing in the department.

INTERMEDIATE STANDING

Requirements for Intermediate Standing to progress through the Movement Science and Athletic Training majors:

Minimum GPA of 2.3 in the following courses:

- MOVP 0100 Introduction to Exercise Science
- MOVP 0105 Foundations of Movement Science I
- MOVP 0106 Foundations of Movement Science II
- BIOL 0237 Anatomy and Physiology I
- BIOL 0239 Anatomy and Physiology II
- MOVP 0202 Introduction to Motor Learning or
- MOVP 0203 Motor Development and Behavior

Personal Statement

Resume

First Aid / CPR Certification

Membership in a professional organization

Earn a minimum of 15 Professional Development Points

Faculty Recommendations

As part of Teacher Preparation – Intermediate Standing requirements, students must have registered/completed MTEL: Communication and Literacy Test.

Two examples of best work

ADVANCED STANDING

Advanced Standing is required for those completing an internship, ATEP clinical experience, or student teaching practicum. The requirements are as follows:

Minimum GPA of 2.5 in the major core area (29 credits)

Minimum GPA of 2.7 in the courses in the concentration

(Placement in the Teaching Practicum requires a 2.8)

Minimum overall GPA of 2.8

Personal Statement

Resume

First Aid / CPR Certification

Membership in a professional organization

Earn a minimum of 15 Professional Development Points

(in addition to those earned for Intermediate Standing)

Faculty Recommendations

Supervising Practitioner Recommendations

Additional information can be found in the MSSLS Department manual.

MINOR IN WILDERNESS LEADERSHIP - 18 CREDITS

The Movement Science Department also offers a minor in Wilderness Leadership. The requirements are the same as for the Wilderness Leadership Concentration, except an internship is not required, nor is completion of the major core required.

INTERDISCIPLINARY MINOR IN COMMERCIAL RECREATION AND TOURISM - 18 CREDITS

The Economics and Management, Movement Science, and Geography and Regional Planning Departments offer an interdisciplinary minor in commercial recreation and tourism. A full description of the requirements for this minor is included in the Economics and Management section of the Bulletin.

Courses

MOVP 0100 INTRODUCTION TO EXERCISE SCIENCE (3) Through observation and experimentation students will examine the cardiorespiratory, musculoskeletal and nervous systems of the body and the impact of exercise on their functioning. The effect of changing one's own personal exercise habits on risk factors for cardiovascular disease, longevity and quality of life will be explored.

MOVP 0101 CLINICAL EXPERIENCES IN EXERCISE SCIENCE I (1) Exercise Science Program course designed to teach basic skills relating to assessment, equipment knowledge and calibration. In addition, students will develop communication and interpersonal skills relating to client learning styles through applied experiences in exercise-related assessment and programming. This class must be repeated once. Prerequisite: Exercise Science program Admission and minimum overall GPA of 2.7.

MOVP 0102 INTRODUCTION TO ATHLETIC TRAINING (3) This course introduces the student to the general principles of athletic training. The primary focus of the course is the prevention and management of injuries to and illnesses of athletes and those engaged in physical activity.

MOVP 0103 INTRODUCTION TO TEACHING PHYSICAL EDUCATION (1) This course will provide initial exposure to school physical education programs and the opportunity to integrate concepts of the movement science courses with the curriculum in the schools. Field-based pre-practicum (30 clock hours) with classroom follow-up. Prerequisite: MOVP 0105 or MOVP 0106.

MOVP 0105 FOUNDATIONS OF MOVEMENT SCIENCE I (3) Provides the student with the opportunity to examine the historical and philosophical foundations of movement sciences.

MOVP 0106 FOUNDATIONS OF MOVEMENT SCIENCE II (3) Designed to provide the student with the opportunity to examine the sociological and psychological foundations of human movement and sport.

MOVP 0107 EXERCISE INJURIES: PREVENTION AND TREATMENT (3) Provides the student with the knowledge of the general principles of athletic training. The emphasis of the course will be the prevention and management of exercise/sport injuries and conditions.

MOVP 0108 PRINCIPLES OF HEALTH AND WELLBEING (3) Designed to assist the student in developing a lifestyle conducive to good health and wellbeing. Identification of risk factors which affect longevity will be discussed. Included will be substance abuse, emotional and environmental factors, diet and exercise.

MOVP 0190 FIRST AID AND EMERGENCY CARE (1) Provides the fundamental principles, knowledge and skills of first aid and accident prevention. Prepares the individual to care for most injuries and emergencies when medical assistance is delayed. First Aid and CPR certification will be available upon successful completion of the course.

MOVP 0191 ATHLETIC TRAINING SKILLS (1) Athletic Training Education Program course with focus on skill development in the immediate care and prevention of athletic injuries and illness through structured laboratory exercises and clinical experiences. This course must be repeated once and may be repeated more than once, but no more than 2 credits may be applied to the major. Prerequisites: Permission of instructor.

MOVP 0199 WILDERNESS EXPERIENCES (3) An introduction to wilderness activities which provide participants with a degree of challenge and excitement. Will include current information on the most popular activities, with attention given to the history, equipment needs, travel arrangements, safety and first aid procedures, physical skills, liability problems and environmental concerns. The theories behind these activities and the organizational methods for conducting them, also will be included.

MOVP 0201 CLINICAL EXPERIENCES IN EXERCISE SCIENCE II (1) Exercise Science program course designed to teach basic skills relating to assessment, equipment knowledge and calibration. In addition, students will develop communication and interpersonal skills relating to client learning styles through applied experiences in exercise-related assessment and programming. This course must be repeated once and may be repeated more than once, but no more than 2 credits may be applied to the major. Prerequisite: Exercise Science program Admission and minimum overall GPA of 2.7.

MOVP 0202 INTRODUCTION TO MOTOR LEARNING (3) The study of significant variables which influence motor learning, i.e., transfer, cues, practice, reminiscences, perception, reaction time, motivation, reinforcement, etc. and the analysis of selective variables which affect the acquisition of motor skills. Prerequisite: PSYC 0101.

MOVP 0203 MOTOR DEVELOPMENT AND BEHAVIOR (3) The scientific study of developmental patterns (psychomotor, cognitive and affective domains) of basic motor skills and structural components, growth processes and interrelationships/interactions of structure to function that influence motor behavior - infancy to old age. Prerequisite: PSYC 0101.

MOVP 0204 KINESIOLOGY (3) Science of human motion, analysis of leverage in body movement and problems of readjustment in relationship to body mechanics and to physical activity as it is related to an understanding of skillful, efficient and purposeful human motion. A lab component is included. Prerequisite: BIOL 0237.

MOVP 0205 PHYSIOLOGY OF EXERCISE (3) Designed to investigate and understand the role that exercise (muscle activity) plays on the functioning of the human body and how the body responds to exercise. A laboratory component is included. Prerequisite: BIOL 0239.

MOVP 0211 EMERGENCY MEDICAL TECHNICIAN (4) This course is designed to provide the student with the theoretical understandings and practical experiences in dealing with medical emergencies. Topics included are rescue breathing, cardiopulmonary resuscitation, airway obstruction, oxygen therapy, soft tissue and internal injuries, ambulance operations, and emergency extrication. Class meets for two (2) hours of lecture and four (4) hours of laboratory. (Upon successful completion of the course students will be able to sit for the EMT-M certification examination conducted by the Massachusetts Department of Public Health Offices of Emergency Services.) Costs associated with required equipment/materials and certification fees are additional and are the responsibility of the student.

MOVP 0212 CONCEPTS OF NUTRITION (3) Includes basic principles of nutrition and the body's use of nutrients. Emphasis on the effect of diet on selected health problems as well as the relationship between diet and athletic habits using a variety of established guidelines including the use of a computerized diet analysis. Prerequisite: any laboratory science course.

MOVP 0234 EVALUATION OF UPPER EXTREMITY INJURIES

(3) This course addresses the skills and knowledge needed to conduct a thorough clinical evaluation of injuries that commonly occur to the upper extremity in a sports/fitness environment. Two hour lecture and two hour laboratory. Prerequisite: BIOL 0237.

MOVP 0235 EVALUATION OF LOWER EXTREMITY INJURIES

(3) This course addresses the skills and knowledge needed to conduct a thorough clinical evaluation of injuries that commonly occur to the lower extremity in a sports/fitness environment. Two hour lecture and two hour laboratory. Prerequisite: BIOL 0237.

MOVP 0237 ATHLETIC TRAINING CLINICAL EXPERIENCE (2)

Athletic Training Education Program course with focus on the application of skills and clinical decision-making in diagnosis and immediate care of athletic injuries and illness through class discussions, structured laboratory exercises and clinical experiences. This course must be repeated once and may be repeated more than once, but no more than 4 credits may be applied to the major. Prerequisite: Permission of instructor.

MOVP 0245 ADVENTURE CHALLENGE INSTRUCTOR (3)

The operation, management and design of an Adventure Challenge Ropes Course. This includes liability responsibilities, group process, construction and maintenance, safety procedures and technical skill. Satisfactory completion will result in one year certification of Adventure Challenge Instructor at Westfield State University.

MOVP 0250 TECHNIQUES OF WILDERNESS LEADERSHIP (3)

Techniques of planning, developing, organizing, and conducting an extended Wilderness Experience. Leadership training will also include first aid, rescue, navigation and legal responsibilities of these experiences. Prerequisite: MOVP 0199.

MOVP 0255 FUNCTIONAL ANATOMY (3)

Study of the skeletal and muscular structures involved in human movement. Designed to enable students to identify the structure and function of the spine and lower and upper extremity through computer simulation and application. Prerequisite: BIOL 0237.

MOVP 0260 ANALYSIS OF TEACHING SELECTED PHYSICAL EDUCATION SKILLS/ELEMENTARY (4)

This course provides the student with the knowledge and methodology of selected activities appropriate for the elementary school child. The course will include locomotor, non-locomotor, manipulative, body management and specific sports skills as taught through games of low organization, lead-up activities to games of higher organization and rhythmic. Consideration will be given to analysis of performance organization and progression. The course will consist of two hours of lecture and four hours of laboratory. Prerequisites: MOVP 0105 and MOVP 0106.

MOVP 0261 ANALYSIS OF TEACHING SELECTED PHYSICAL EDUCATION SKILLS/SECONDARY (4)

This course provides the student with the knowledge and methodology of teaching games, sports and physical activities in a secondary physical education program. The course will include team and individual sports, non-traditional games and dance/rhythmic activities. Emphasis will be placed on analysis of performance, sequence and progression of skills and lead-up games, and effective organizational techniques applied in teaching these selected activities. This course will consist of two hours of lecture and four hours of laboratory. Prerequisites: MOVP 0105 and MOVP 0106.

MOVP 0262 ANALYSIS OF TEACHING SELECTED PHYSICAL EDUCATION SKILLS II (2)

Provides the student with the knowledge and methodology appropriate for selected physical education skills: aquatics, tumbling and gymnastics, and track and field. Emphasis will be placed on analysis of performance, sequence, progression of skills and effective organizational techniques applied in teaching these activities. Will include safety procedures. Prerequisite: MOVP 0105 and MOVP 0106.

MOVP 0292 PRINCIPLES OF GROUP EXERCISE PROGRAMMING (3)

This course will highlight exercise leadership and programming through the process of teaching and instruction within various group exercise science settings. Theoretical principles related to group exercise class programming; teaching methods, class management and control, instructional media and materials, and self-evaluation are presented. In addition, a variety of group exercise modalities will be explored. This course prepares the student to take a nationally recognized group exercise certification exam. Prerequisite: MOVP 0101 or permission of instructor.

MOVP 0301 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL (3)

Philosophy, program planning and methods of teaching children, guided observational experiences of children in schools, presentation of activities suitable in elementary school programs.

MOVP 0302 MEASUREMENT & EVALUATION IN PHYSICAL EDUCATION (3)

This course is designed to provide the student with an opportunity to gain knowledge of elementary statistical techniques and measurement procedures applicable to the discipline of physical education. Students will be expected to develop competency in the selection, development, and administration of valid testing and evaluation programs in physical education. Prerequisite: Intermediate Standing and MOVP 0313 or MOVP 0314 or permission.

MOVP 0303 HEALTH EDUCATION IN THE ELEMENTARY SCHOOL (3)

An investigation of current content and practices necessary for implementation of effective, integrated early childhood and elementary school health education programs. This course provides an exploration of child health status and the vital role the elementary teacher plays in enabling children to acquire healthful lifestyle behaviors as they grow and develop. Prerequisite: Permission of instructor.

MOVP 0304 PSYCHOLOGY OF COACHING (3)

This course concentrates on the principles and techniques applicable to the coaching of sports at the elementary and secondary levels. Prerequisites: MOVP 0106 and PSYC 0101.

MOVP 0305 PRINCIPLES OF STRENGTH AND CONDITIONING (3)

This course examines the scientific theories and principles of the physical conditioning process. Emphasis is placed on the design and implementation of effective strength and conditioning programs for enhanced health and fitness. Topics include analysis of sport-specific performance demands, physiological adaptation to training, power and force production, functional strength training across the life span, theory of periodization and application, plyometric training, speed development. This course will also prepare the student to take the Certified Strength and Conditioning Specialist exam through the NSCA. Prerequisites: MOVP 0204 and MOVP 0205 and intermediate standing.

MOVP 0308 PHYSICAL EDUCATION IN THE SECONDARY SCHOOL (3)

This course will explore content offered in the second-

ary curriculum (5-12). Students seeking certification at the elementary level (includes middle school) are encouraged to enroll. The content explores the teaching of various invasion, net/wall, target, and striking games by introducing strategies and skills through modified game play, as opposed to the drill, practice, and play of more traditional physical education teaching styles. An emphasis will be placed on incorporating the teaching of skills into strategies through drills and modified games. Evaluate procedures for performance (rubrics, standardized skill tests, videotape) will be introduced. Prerequisite: MOVP 0103 or MOVP 0260/0261 or MOVP 0262 or permission.

MOVP 0309 OUTDOOR RECREATION (3) An in-depth analysis of outdoor recreational activities. Includes skills of living in nature in respect to wilderness camping and environmental awareness, campcraft skills; planning and conducting outdoor recreation programs. Prerequisite: Permission of instructor.

MOVP 0310 GEROKINESIOLOGY (3) Designed to focus on the physiological processes of aging and the impact of specific exercise programming for the older adult population. Students will gain an understanding of common orthopedic and cardiovascular considerations and develop an ability to employ modifications in exercise testing and prescription through service learning experiences with the older adult population. Other topics include: common health problems and illnesses, drugs/medications, psychological and sociological needs, and activities of daily living relevant for the older adult population. Prerequisite: MOVP 0204 and MOVP 0205.

MOVP 0311 ADAPTIVE PHYSICAL EDUCATION (3) The course will cover scientific techniques used in assessment, identification, skill analysis and program implementation for special needs students. Consideration will be given to characteristics, needs and related problems associated with conditions such as retardation, learning disabilities, behavioral disorders, orthopedic disabilities, visual and hearing impairment, chronic illnesses, bilingual and multicultural problems of children and their integration into physical education programs. Special attention will be given to the impact of federal and state regulations as they relate to adapted and mainstreamed physical education. Twenty (20) hours of field work required. Prerequisite: Intermediate Standing.

MOVP 0313 PHYSICAL EDUCATION TEACHING METHODOLOGY: ELEMENTARY (3) Analysis of performance and methods of teaching selected motor activities for the elementary level. Included will be growth and development as it relates to program planning and implementation, class management, teaching styles, formulation of goals and objectives through lesson and unit plans, sequencing and progression for teaching skills, fundamental motor patterns and game usage. A forty (40) hour pre-practicum at the elementary level is required. Prerequisites: MOVP 0206 and MOVP 0261 and MOVP 0262 and Intermediate Standing.

MOVP 0314 PHYSICAL EDUCATION TEACHING METHODOLOGY: SECONDARY (3) Analysis of skill performance and methods of teaching physical education in the secondary school. Will include organization, sequence and progression for teaching skills, formulation of objectives and goals through lesson and unit plans, evaluation of lessons, class management and teaching styles. A forty (40) hour pre-practicum at the secondary level is required. Prerequisites: MOVP 0260 and MOVP 0261 and MOVP 0262 and Intermediate Standing.

MOVP 0316 CURRICULUM PLANNING & IMPLEMENTATION (2) This course will provide for the development of curricular designs in Physical Education for programs in schools through evaluation of existing programs and the study of current trends and development in relation to their influence on the curriculum. Prerequisite: Intermediate Standing and MOVP 0313 or MOVP 0314.

MOVP 0319 GENERAL MEDICAL ASPECTS OF PHYSICAL ACTIVITY (3) This course focuses on the recognition, immediate treatment and referral of common non-orthopedic injuries and illnesses that may occur during or be exacerbated by physical activity. Medical terminology, documentation, pre-participation physical examinations, diagnostic imaging, pharmacology, standard practices for counseling intervention, and position statements regarding participation in physical activity will also be discussed. Prerequisites: Intermediate Standing.

MOVP 0320 FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION (3) Analysis of the facets of fitness assessment and exercise prescription, based on the guidelines and certification requirements established by the American College of Sports Medicine. Students will participate in, administer, and analyze: exercise stress tests, body composition assessment, muscular strength, endurance, and flexibility tests. Concepts, principles and theories based on research from the fields of exercise physiology, kinesiology, nutrition, and tests and measurement will be applied to fitness assessment and exercise prescription. Prerequisites: MOVP 0204 and MOVP 0205 and Intermediate Standing.

MOVP 0321 SUPERVISING SPORTS/FITNESS PROGRAMS (3) An overview of the objectives, strategies and policies regarding the managing sports/fitness programs. Specific learning experience will be designed to enhance the individual's technical, human, and conceptual skills. Prerequisite: Intermediate Standing.

MOVP 0323 THERAPEUTIC MODALITIES (3) Examines the use of therapeutic modalities as a component of athletic injury reconditioning programs. Theory, clinical applications and legal aspects are considered. Two lectures, two hour laboratory, weekly. Prerequisites: MOVP 0204 and MOVP 0205 and Intermediate Standing.

MOVP 0325 WOMEN AND SPORT (3) Provides an overview of the concerns of women within the social institution of sport. The historical, socio-psychological, and physiological aspects of female sport participation will be examined and discussed. Issues related to the impact of social change within sport upon the female athlete will be addressed. Prerequisite: WSTP 0101, PSYC 0101, or SOCI 0101.

MOVP 0326 CHILDREN IN COMPETITIVE SPORTS (3) This course examines the cognitive, behavioral, biological, and environmental factors having important implications for competitive sport participants from early childhood through high school. Special attention will be placed on the practical application of sport science research for teachers, coaches, and administrators. Prerequisites: MOVP 0202 and MOVP 0203; or permission of instructor.

MOVP 0327 THERAPEUTIC EXERCISE (3) A study of the principles and techniques associated with the planning and implementation of exercise programs designed to restore and improve musculoskeletal function. Students will learn how to develop reconditioning and rehabilitation programs including the components of range of motion, strength, stretching, joint mobilization, neuromuscular facilitation, and cardiovascular exercise. Emphasis on practical decision making related to the setting of program goals and the selection of appropriate exercises to achieve those goals. Two hour lecture and two hour laboratory. Prerequisites: Intermediate Standing and MOVP 0204 and MOVP 0205.

MOVP 0328 FITNESS/REHAB FOR SPECIAL POPULATIONS (3) This course will explore fitness assessment and exercise prescription for special populations. The effects of exercise on the process of aging will be examined. The special needs of those individuals with various medical conditions will be explored. Research in the areas of exercise physiology and medicine will serve as resources for the development of safe and effective exercise programs for individuals with special needs. Prerequisites: MOVP 0205 and MOVP 0204 and Intermediate Standing.

MOVP 0329 BASIC EKG AND STRESS TESTING (1) Through observation and experimentation, students will examine the anatomy and physiology, electrical conduction, and arrhythmias of the cardiovascular system and its relationship to activity tolerance and ischemic burden. Prerequisite: BIOL 0237 or permission of instructor.

MOVP 0330 SPORTS PROMOTION (3) An introduction to the issues, principles, and skills of sports promotion pertaining to the educational, recreational, and professional sports arenas. Focus will be on the structure and economic impact of the sports industry and the acquisition of skills required to effectively promote a sports program. Prerequisite: Junior standing.

MOVP 0331 SPORT AND EXERCISE PSYCHOLOGY (3) This course will require students to examine the theoretical foundations of sport and exercise psychology, as well as introduce students to the psychological skills commonly utilized in applied sport and exercise psychology. The research methods commonly utilized in sport and exercise psychology also will be considered.

MOVP 0332 NUTRITION AND HUMAN PERFORMANCE (3) This course is designed to investigate and understand how a combination of nutrition and exercise can lead to better health and performance, and how foods are converted to energy, energy sources used during exercise/performance, and optimal nutrition for exercise and sport. Topics will include: healthful dietary guidelines, bioenergetics, human metabolism during rest and exercise, the six classes of nutrients and their roles in exercise, body composition (body fat and muscle mass), weight management, and nutritional ergogenic aids.

MOVP 0335 RESEARCH METHODS IN PHYSICAL ACTIVITY AND HEALTH (3) Selected research techniques and designs, with emphasis on planning, conducting, and reporting of research; applied statistical analysis and interpretation of data from the fields related to physical activity and health. Prerequisite: MATH 0108.

MOVP 0337 ATHLETIC TRAINING RESEARCH AND CLINICAL DECISION MAKING (3-6) Athletic Training Education program course with focus on clinical decision making and research in prevention, evaluation, immediate care, treatment and rehabilitation of athletic injuries and illness through clinical experiences and research projects. This course must be repeated once and may be repeated more than once, but no more than 12 credits may be applied to the major. Prerequisite: Advanced standing and permission of instructor.

MOVP 0348 PRACTICUM I IN PHYSICAL EDUCATION: ELEMENTARY (6) Supervised observation and student teaching in an elementary school, conduct of classes and extra-curricular activities, development and understanding of school and community. Emphasis on continuity of lessons, units, daily evaluation. Supervision by cooperating school practitioner and Physical Education faculty from the University. Individual conferences and group seminars. Prerequisites: Advanced standing, MOVP 0313, and current First Aid certificate.

MOVP 0349 PRACTICUM II IN PHYSICAL EDUCATION: ELEMENTARY (6) Supervised observation and student teaching in an elementary school, conduct of classes and extra-curricular activities, development and understanding of school and community. Emphasis on continuity of lessons, units, daily evaluation. Supervision by cooperating school practitioner and Physical Education faculty from the University. Individual conferences and group seminars. Prerequisite: MOVP 0348.

MOVP 0350 PRACTICUM I IN PHYSICAL EDUCATION - SECONDARY (6) Supervised observation and student teaching in a secondary school, conduct of classes and extra-curricular activities, development and understanding of school and community. Emphasis on continuity of lessons, units, daily evaluation. Supervision by cooperating school practitioner and Physical Education faculty from the University. Individual conferences and group seminars. Prerequisite: Advanced standing.

MOVP 0352 PRACTICUM II IN PHYSICAL EDUCATION - SECONDARY (6) Supervised observation and student teaching in a secondary school, conduct of classes and extra-curricular activities, development and understanding of school and community. Emphasis on continuity of lessons, units, daily evaluation. Supervision by cooperating school practitioner and Physical Education faculty from the University. Individual conferences and group seminars. Prerequisite: MOVP 0350.

MOVP 0353 CLINICAL EXPERIENCE IN ATHLETIC TRAINING (6-12) Course requires working with a certified athletic trainer in another school for practical experience. Duties to include: administering first aid, administration of therapy treatment, observation of work of the clinical supervisor and duties assigned by the clinical supervisor. Prerequisite: Advanced standing.

MOVP 0355 PRACTICUM SEMINAR: PHYSICAL EDUCATION (3) The practicum seminar is a series of formal meetings to provide an opportunity for student teachers to perceive relationships among ideas in problem situations, to explore creative situations, to increase familiarity with many resources and materials, and to develop wholesome personal and professional relationships. Special programs are presented with the aid of professional resource persons. Identification of educational innovations, problems and suggestions for the present and future needs of students and school personnel are a pertinent part of the practicum experience. Prerequisite: Concurrent enrollment in practicum.

MOVP 0390 SENIOR SEMINAR IN EXERCISE SCIENCE (1) Provides an opportunity for senior-level Exercise Science students to discuss current issues in the field as well as the transition to professional practice or graduate school. Preparation for professional certification examinations and post-graduation professional development will also be examined. Prerequisite: Advanced Standing or permission of instructor.

MOVP 0395 INTERNSHIP SPORTS MEDICINE (6) Provides the student enrolled in the Sports/Medicine Concentration with an opportunity to do in service work with public and private agencies/institutions in the community. The students will work under the supervision of the agency/institution director and will be supervised by a faculty member from the MSSLS Department. Students will be expected to assist in the development as well as conduct of Sports Medicine programs offered. Students are expected to fulfill a minimum of 280 clock hours. Individual conferences and group seminars are held in addition to the 280 clock hours. Prerequisites: Advanced Standing.

MOVP 0397 EXERCISE SCIENCE CAPSTONE INTERNSHIP (4-12) Provides the student enrolled in the Exercise Science Concentration with an opportunity for further practical experience in a related field. The students will work under the supervision of an agency/institution director and will be supervised by a faculty member from the MSSLS Department. This capstone experience will include a major and minor project, case study, journal reflection and formal presentation. Individual conferences and group seminars are held in addition to the clock hours. Prerequisite: Advanced Standing.

MOVP 0398 INTERNSHIP WILDERNESS LEADERSHIP (6) Provides the student enrolled in the Wilderness Leadership concentration with an opportunity to work with public and/or private agencies/institutions in the community conducting wilderness programs. The student will work under the supervision of the agency/institution director and will be supervised by a member from the MSSLS department. Students will be expected to assist in the development as well as the conduct of the Wilderness Programs offered. Students are expected to fulfill a minimum of 280 clock hours. Prerequisite: Advanced standing and completion of courses in the Wilderness leadership concentration with a minimum QPA of 2.5 and current First Aid certificate.

MOVP 0399 INDEPENDENT STUDY (1-6) Individual research and independent study related to a particular phase of Movement Science, health or recreation with approval from the Movement Science Department. Prerequisite: Movement Science Major with Advanced Standing.

SKILLS COURSES

MOVP 0109 AEROBICS	(1)
MOVP 0111 BADMINTON	(1)
MOVP 0113 FITNESS FOR ADULTS: WALKING	(1)
MOVP 0118 STEP AEROBICS	(1)
MOVP 0127 VOLLEYBALL	(1)
MOVP 0131 BEGINNERS' SWIMMING	(1)
MOVP 0132 INTERMEDIATE SWIMMING	(1)
MOVP 0137 SKIN AND SCUBA	(1)
MOVP 0138 BOATING AND CANOEING	(1)
MOVP 0139 KAYAKING	(1)
MOVP 0149 TENNIS	(1)
MOVP 0152 GOLF I	(1)
MOVP 0154 DOWN HILL SKIING	(1)
MOVP 0155 SKI AND TOURING AND SNOWSHOEING	(1)
MOVP 0162 STRENGTH TRAINING & CONDITIONING	(1)
MOVP 0167 CAMPING SKILLS	(1)
MOVP 0171 DIVING	(1)
MOVP 0172 ORIENTEERING	(1)
MOVP 0173 INITIATIVE GAMES AND ROPES	(1)
MOVP 0180 ROCK CLIMBING	(1)
MOVP 0181 AQUA AEROBICS	(1)
MOVP 0182 LIFEGUARD TRAINING	(2)
MOVP 0183 RELAXATION TECHNIQUES	(1)
MOVP 0184 WATER SAFETY INSTRUCTOR	(2)
MOVP 0185 SWIMMING FOR FITNESS	(1)