

PHYSICAL EDUCATION/ MAJOR (PEMJ)

PEMJ 131 Fitness Activities (3 credits)

A comprehensive course to provide the student with knowledge needed for developmental programming of personalized fitness activities utilizing all modes of fitness training. Meets Gen Ed - Physical Education.

PEMJ 145 Dance in the Schools (2 credits)

Restriction(s): Physical Education, Health and Physical Education, Teaching, Physical Science, Physical Education w/ conc: Phys Actvty in Ed Setting, Physical Education w/ conc: Coaching, Physical Education majors only or departmental approval. This course provides an overview of the theory, instruction and performance in the fundamentals of folk, square, and social dance forms.

PEMJ 152 Introduction to Fielding and Target Games (3 credits)

Restriction(s): Health and Physical Education, Physical Education, Teaching, Sports Coaching minor, or departmental approval. This course provides an overview of the history, theory, pedagogical strategies, performance and assessment of fielding and target games such as baseball and archery. Student have opportunities to perform in fielding and target games and to develop basic knowledge of skills, pedagogical strategies, officiating techniques, tournament knowledge, and skill assessment in those types of games. Students will be prepared to develop, implement and assess units of activities in these types of games. As part of the course they develop a comprehensive sport portfolio. Open only to physical education majors.

PEMJ 153 Introduction to Invasion and Net Games (3 credits)

Restriction(s): Health and Physical Education, Physical Education, Teaching, Sports Coaching minor, or departmental approval. This course provides an overview of the history, theory, pedagogical strategies, performance, and assessment of invasion and net games such as basketball and tennis. Students have opportunities to perform in invasion and net games and to develop basic knowledge of skills, pedagogical strategies, officiating techniques, tournament knowledge, and skill assessment in those types of games. Students will be prepared to develop, implement and assess units of activities in these types of games. As part of the course they will develop a comprehensive sport portfolio. Open only to physical education majors.

PEMJ 200 Human Motor Development (1 credit)

Prerequisite(s): BIOL 110. Restriction(s): Physical Education, Health and Physical Education, Teaching, Physical Science, Physical Education w/ conc: Phys Actvty in Ed Setting, Physical Education w/ conc: Coaching, Physical Education majors only or departmental approval. This class provides students with an overview of changes to human motor skill that occur over the lifespan, with a focus on the development of fundamental motor patterns and skills that are relevant to school-aged children. Students also study concurrent changes that interact with motor development, such as cognitive, social, and physical changes.

PEMJ 226 Coaching Principles and Problems (3 credits)

Prerequisite(s): HPEM 199 or GNED 199 or WRIT 105 or HONP 100. This course is designed to present an overview of the principles and problems pertaining to coaching on the high school and college levels.

PEMJ 227 Social Problems in Sports (3 credits)

Prerequisite(s): HPEM 199 or GNED 199 or WRIT 105 or HONP 100. This course is designed to analyze a number of important and controversial issues in sports in American society. Through the use of an issues-oriented approach, students will become aware of the relationship between sports in American society and social problems in a number of areas including economics, education, ethics and politics. Meets Gen Ed - Social Science Perspectives.

PEMJ 235 Movement Experiences in Physical Education (3 credits)

Prerequisite(s): PEMJ 152 or PEMJ 153. A comprehensive activity course designed to present theory and practical application of movement experiences and non- sport activities in physical education in the elementary school.

PEMJ 248 Teaching Educational Gymnastics (1-2 credits)

Prerequisite(s): PEMJ 131. Restriction(s): Physical Education, Health and Physical Education, Teaching, Physical Science, Physical Education w/ conc: Phys Actvty in Ed Setting, Physical Education w/ conc: Coaching, Physical Education majors only or departmental approval. This course provides knowledge and understanding of the techniques of educational gymnastics in a physical education program in a school setting.

PEMJ 320 Physiology of Exercise (4 credits)

Prerequisite(s): BIOL 244 for Athletic Training, Exercise Science, Physical Education, Health and Physical Education, Teaching-Physical Ed P-12, Teaching-Health PE P-12, Teaching-Phys Ed P-12 & TSD, Teaching-Health PE P-12 & TSD, Phys Ed-BS/MAT P-12 & Hlth, PE&TSD; BIOL 240 or BIOL 243 and departmental approval for Sports Nutrition minor. Restriction(s): Athletic Training, Exercise Science, Physical Education, Teaching-Health PE P-12, Teaching-Health PE P-12 & TSD, BS/MAT P-12 & Hlth, PE &TSD, Sports Nutrition minor. The physiological effects of physical activity upon the human organism. The reaction of exercises of speed, strength, and endurance upon the muscular and circulo-respiratory systems.

PEMJ 321 Kinesiology (3 credits)

Prerequisite(s): BIOL 244 for Athletic Training, Exercise Science, Physical Education, Health and Physical Education, Teaching-Physical Ed P-12, Teaching-Health PE P-12, Teaching-Phys Ed P-12 & TSD, Teaching-Health PE P-12 & TSD, Phys Ed-BS/MAT P-12 & Hlth, PE&TSD; BIOL 240 or BIOL 243 and departmental approval for Sports Nutrition minor. Restriction(s): Athletic Training, Exercise Science, Physical Education, Teaching-Health PE P-12, Teaching-Health PE P-12 & TSD, BS/MAT P-12 & Hlth, PE &TSD, Sports Nutrition minor. An overview of the integrated functioning of the skeletal, muscular, and nervous systems and the biomechanical principles governing efficient movement, in order to effectively analyze the performance of motor skills.

PEMJ 324 Basic Motor Learning (3 credits)

Prerequisite(s): BIOL 244 for Athletic Training, Exercise Science, Physical Education, Health and Physical Education, Teaching-Physical Ed P-12, Teaching-Health PE P-12, Teaching-Phys Ed P-12 & TSD, Teaching-Health PE P-12 & TSD, Phys Ed-BS/MAT P-12 & Hlth, PE&TSD. Restriction(s): Athletic Training, Exercise Science, Physical Education, Teaching-Health PE P-12, Teaching-Health PE P-12 & TSD, BS/MAT P-12 & Hlth, PE &TSD. This course provides students with knowledge of the theoretical basis of human learning and performance in motor activity.

PEMJ 335 Teaching of Elementary Physical Education (3 credits)

Prerequisite(s): PEMJ 200 or PEMJ 235. Restriction(s): Physical Education, Health and Physical Education, Teaching, Physical Education w/ conc: PhysActvty in Ed Setting majors only or departmental approval. An introduction to movement education, elementary physical education teaching methods and activities, and various techniques appropriate for teaching physical education at the elementary level. Topics include basic movement skills, manipulative and non-manipulative skills, lead-up games to team and individual and dual sport skills, and tumbling activities.

PEMJ 351 Adapted Physical Education (3 credits)

Prerequisite(s): PEMJ 200 or PEMJ 235. Restriction(s): Physical Education, Health and Physical Education, Teaching, Physical Education w/ conc: Phys Actvty in Ed Setting, Physical Education majors only or Sports Coaching minor or departmental approval. This is a lecture and practicum course covering the introductory techniques for conducting a physical education program to meet the needs of the developmentally disabled. Each student is required to spend a minimum of 15 hours of laboratory experience in schools, agencies, and/or institutions.

PEMJ 353 Psychology of Sport (3 credits)

Prerequisite(s): Any 200-level course or departmental approval. Psychology related to physical activity on emotional, attitudinal and personality aspects, motivation, cultural and sociological problems of athletes, spectator response and deportment.

PEMJ 381 Cooperative Education in Physical Education (4-8 credits)

Prerequisite(s): Departmental permission. Integrates academic study with supervised employment outside the formal classroom environment. The co-op term is a semester off-campus during which a student, while supervised by a department faculty coordinator is responsible for completing the terms of a predetermined learning contract. Available to students not completing the student-teacher sequence only.

PEMJ 399 Independent Study in Physical Education (1-6 credits)

Prerequisite(s): Departmental permission. Provides an opportunity to pursue independent study in one of the specialized areas of physical education. With department approval, may be repeated without limit as long as the topic is different.

PEMJ 410 Legal Aspects of Sport, Fitness and Physical Education (3 credits)

Prerequisite(s): HPEM 356. In this course students examine current legal aspects impacting athletic administration, fitness, and physical education. Students study and apply concepts related to liability, risk management, gender equity, performance enhancing drugs, compliance to governing organizations, and code of conduct in sport, fitness and educational settings.

PEMJ 412 Facility Management in Sport, Fitness and Physical Education (3 credits)

Prerequisite(s): HPEM 356 may be taken as prerequisite or corequisite. In this course students examine management functions in the operation of a variety of sport, fitness and physical education facilities. The students demonstrate the ability to apply appropriate methods for planning, designing, managing, and financing private and public sport organizations. Furthermore, students explore concepts related to human resources, financial and risk management, programming and special event planning.

PEMJ 414 Sport Marketing and Public Relations (3 credits)

Prerequisite(s): HPEM 356. A course in the application of marketing principles and public relations strategies within the context of a sport setting. Analysis of consumer trends will be employed to enhance development, sales and promotion of sport products. In addition, approaches to establishing and maintaining a positive public image will be examined including communication through the media, partnerships with local community and website construction.

PEMJ 421 Technology Integration in Exercise Science and Physical Education (3 credits)

Prerequisite(s): HPEM 355 may be taken as prerequisite or corequisite. This course provides the fundamentals of current technologies in the three following areas: (a) integrating technology in the classroom to introduce teachers to those aspects of educational technology that are designed to facilitate teaching and learning; (b) integrating technology in the fitness lab to introduce teachers and fitness specialists to computer-based health-management systems that allow for exercise evaluation, nutrition evaluation and health-risk assessments; and (c) using technology to manage the professional office including document processing, spreadsheet applications, database management, graphic construction, and communications.

PEMJ 431 Advanced Adapted Physical Education (3 credits)

Prerequisite(s): PEMJ 351. Class sessions will discuss psychosocial implications of disabilities and how they relate to the classroom, appropriate program planning to help all students be successful, and assessing students with disabilities in all domains. Current issues related to adapted physical education, inclusive physical education, and disability sport will also be discussed. A practicum component is a requirement of the course where students will work with people with disabilities in the school or agency setting.

PEMJ 444 Seminar in Physical Education (1 credit)

Corequisite(s): SASE 452 and SASE 453; or SASE 414. Prerequisite(s): SASE 305 or EDFD 305 or READ 305; and SASE 312 or EDFD 312 or READ 312. Restriction(s): Physical Science majors only. This course permits physical education student teachers an opportunity to discuss and evaluate the experiences they have in a physical education setting while student teaching.

PEMJ 447 Advanced Coaching Techniques (3 credits)

Prerequisite(s): PEMJ 324 and PEMJ 320. Advanced methods for assessing and improving athletes' performances. Includes principles of coaching, talent development, the organization of practice, effective instruction for skill acquisition, biomechanical principles of performance and match analysis. Permits students to use advanced technological methods as well as practical, hands-on approaches in coaching.

PEMJ 457 Teaching of Secondary Physical Education (3 credits)

Prerequisite(s): PEMJ 335. Restriction(s): Acceptance to Teacher Education Program and departmental approval. This course will prepare teacher candidates to teach physical education in secondary schools. The course is comprised of both on-campus learning activities and field-based practicum experiences. During the on-campus portion of the course students will engage in learning activities and complete assignments (including unit, block and lesson plans and assessment portfolio) necessary to teach physical education effectively in middle, and high school. This course requires candidates to acquire knowledge and teaching behaviors necessary to develop and effectively implement lesson plans for middle, and high school students. The three specific foci include (a) curriculum development and implementation, (b) teacher effectiveness, and (c) behavior management. Topics discussed in this course include curriculum content, effective teaching strategies, creating unit and lesson plans, styles of teaching, classroom management techniques, describing and analyzing student and teacher behaviors, and cooperative learning activities.

PEMJ 492 Special Topics in Physical Education (1-3 credits)

Prerequisite(s): Departmental approval. A theoretical and practical in-depth study in a current aspect of physical education. Topics will be determined prior to course offering and publicized. With department approval, may be repeated without limit as long as the topic is different.

PEMJ 502 Methods of Inquiry and Analysis (3 credits)

Students become skilled in reading and understanding research-based literature involving analytical, descriptive, experimental and qualitative methods in an exercise science and sport administrative setting. Additionally, students learn how to utilize published research to develop a research question and formulate a sound methodology to investigate a problem of interest. Finally, students apply descriptive and inferential statistics through SPSS, along with qualitative methods to make conclusions concerning respective data.

PEMJ 505 Research Design (3 credits)

Prerequisite(s): PEMJ 502. Restriction(s): Completion of a minimum of 21 credits in the program; students should be in good academic standing to be eligible for this capstone experience. In this capstone course students engage in the preliminary steps to conduct a research study in the area of exercise science or sport administration. Each student prepares an in-depth review and analysis of literature related to a specific research topic, develops a formal research proposal and submits the respective protocol to the MSU Institutional Review Board (when applicable).

PEMJ 521 Technology Integration in Exercise Science and Physical Education (3 credits)

This course provides the fundamentals of current technologies in the three following areas: (a) integrating technology in the classroom to introduce teachers to those aspects of educational technology that are designed to facilitate teaching and learning; (b) integrating technology in the fitness lab to introduce teachers and fitness specialists to computer-based health-management systems that allow for exercise evaluation, nutrition evaluation and health-risk assessments; and (c) using technology to manage the professional office including document processing, spreadsheet applications, database management, graphic construction, and communications.

PEMJ 530 Exercise for Special Populations (3 credits)

Prerequisite(s): BIOL 240, PEMJ 320 and departmental approval. In this course, students learn and apply principles of personalized fitness to individuals in special populations. Students examine responses to exercise and special considerations for individuals of varying age (children, older adults) and clinical conditions other than heart disease (arthritis, diabetes, dyslipidemia, hypertension, metabolic syndrome, obesity, osteoporosis, pregnancy, pulmonary disease). Furthermore, students demonstrate the ability to assess exercise capacity using modified protocols and develop safe and effective exercise programs for individuals with special needs.

PEMJ 531 Advanced Adapted Physical Education (3 credits)

Prerequisite(s): PEMJ 351 or departmental approval. Students examine and discuss how psychosocial implications of disabilities relate to the classroom, what appropriate program planning should be implemented to help all students be successful, and how to assess students with disabilities in all domains. Students also explore current issues related to adapted physical education, inclusive physical education, and disability sport. Furthermore, students participate in a practicum component where they work with people with disabilities in a school or agency setting.

PEMJ 539 Advanced Exercise Physiology (3 credits)

Prerequisite(s): An undergraduate course in Exercise Physiology. An advanced course in exercise physiology. Topics include muscular contraction; bioenergetics; energy expenditure; acid-base balance; gas exchange; and the cardiovascular, pulmonary, endocrine, and nervous system responses to acute exercise.

PEMJ 546 Principles of Sports Conditioning (3 credits)

A course in scientific principles of sports conditioning. Training principles and exercise programming will be applied for developing strength, speed, power, agility, endurance, and flexibility. Additional topics include sports nutrition, ergogenic aids, body composition, environmental considerations, fitness testing, overtraining, and sports conditioning management.

PEMJ 548 Practicum in Individualized Exercise Programs (3-6 credits)

Prerequisite(s): Completion of required courses within area of specialization in exercise sciences (12 s.h.) or permission of instructor. This course provides the student the opportunity for practical experience in the application of individualized exercise prescriptions for asymptomatic and/or symptomatic individuals in a variety of nonschool settings.

PEMJ 554 Orientation to Sports Medicine (3 credits)

Students investigate issues related to prevention and basic care of selected injuries and sudden illness in athletes. They also receive training in emergency cardiovascular care including cardiopulmonary resuscitation, first aid, and use of an automated external defibrillation device and will be eligible for certification. By the end of the course students demonstrate ability to apply strategies for minimizing injury risk of athletes in a sport setting.

PEMJ 558 Teaching of Secondary Physical Education (3 credits)

Prerequisite(s): PEMJ 335. Restriction(s): Acceptance to the Graduate School. Teaching Secondary Physical Education is a comprehensive methods course that prepares teacher candidates to teach physical education in secondary schools. Students engage in both on-campus learning activities and field-based practicum experiences. The course focuses on (a) curriculum development and implementation, (b) teacher effectiveness, and (c) behavior management. Topics addressed include curriculum content, effective teaching strategies, creating unit and lesson plans, styles of teaching, classroom management techniques, describing and analyzing student and teacher behaviors, and cooperative learning activities. Students create unit, block, and lesson plans and an assessment portfolio for physical education in middle and high school.

PEMJ 560 Curriculum in Physical Education (3 credits)

This course provides an analysis of current curricular models for physical education programs grades K-12. Strategies for curriculum change are also examined, and students have opportunities to apply theories of curriculum development to actual school settings.

PEMJ 562 Concepts in Physical Activity (3 credits)

Students examine strategies to promote adoption of a physically active lifestyle in education, community, and health fitness settings. Specifically, students explore factors predictive of an active lifestyle, assessment of engagement in physical activity, application of age appropriate programming designed to maximize daily activity, and development of effective physical activity interventions for youth and adults.

PEMJ 565 Reflective Teaching in Physical Education (3 credits)

Students examine reflective practice in teaching physical education, applying strategies and pedagogical skills rooted in theory and effective practice. Furthermore, students explore various teaching behaviors and teacher effectiveness with the aim of maximizing student learning in physical education.

PEMJ 577 Supervision in Physical Education (3 credits)

An analysis of theory and research related to supervision in facilitating effective teaching to provide pupils with appropriate learning experiences in Physical Education programs.

PEMJ 580 Independent Study in Physical Education (1-3 credits)

Prerequisite(s): Departmental approval. An experience in the pursuit of study of topics which may be outside the scope of regular curricular offerings or may be an extension of a course or courses. May be repeated for a maximum of 3 credits. Completion and approval of independent study application form required prior to registration.

PEMJ 592 Special Topics in Exercise Science and Physical Education (3 credits)

In this course, students engage in an in-depth theoretical and practical study of a current aspect of exercise science, sport or physical education. Topics will be determined prior to the course offering and will be publicized. This course may be repeated once for a maximum of 6 credits as long as the topic is different.

PEMJ 594 Internship in Sport and Exercise Science (3 credits)

Prerequisite(s): PEMJ 502. Restriction(s): Completion of a minimum of 21 credits in the program; students should be in good academic standing to be eligible for this capstone experience. In this capstone option students embark on a supervised field experience where they apply knowledge and skills in an exercise science or sport administration setting. At the conclusion of the experience, students submit a formal report of the completed internship outcomes to the faculty of the Department of Exercise Science and Physical Education.

PEMJ 598 Applied Project (3 credits)

Prerequisite(s): Completion of a minimum of 21 credits in the program, including PEMJ 502. Guidance in conducting an applied project in physical education, sport or exercise science. Each student is required to develop a tangible product such as position paper, journal article, action research investigation, instructional videotape/CD ROM, review of curriculum, policy manual, etc. A formal written report of the completed project is to be submitted to the faculty of the Department of Exercise Science and Physical Education.

PEMJ 603 Research Project (3 credits)

Prerequisite(s): PEMJ 502 and PEMJ 505. Restriction(s): Students should be in good academic standing to be eligible for this capstone experience. In this capstone course students conduct a research study in the area of exercise science or sport administration. At the conclusion of the experience students submit a written report of the completed project and orally present their findings of the study to the faculty of the Department of Exercise Science and Physical Education.

PEMJ 698 Master's Thesis (4 credits)

Prerequisite(s): Departmental approval. Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take PEMJ 699 if they don't complete PEMJ 698 within the semester.

PEMJ 699 Master's Thesis Extension (1 credit)

Prerequisite(s): PEMJ 698. Continuation of Master's Thesis Project. Thesis Extension will be graded as IP (in Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.