

2009

Exercise Science (EXSC)

Montclair State University

Exercise Science

	Number and type of credits	3 hours lecture.
	Course Description	In this course, students will critically review the methods through which program evaluators in education, health and human services manage, analyze and summarize quantitative and qualitative data to answer identified evaluation questions. Students will learn about a range of different quantitative and qualitative analytic techniques including basic descriptive statistics, inferential statistics, coding and content analysis, and explore these through hand-on activities. Students also will have hands-on practice with various computer programs for data analysis (e.g., SPSS). By the end of the course, students will be able to select and conduct appropriate data analysis methods and analyze and interpret findings to answer identified evaluation questions.
EVAL530	Title	Applied Field Experience in Program Evaluation.
	Prerequisites	EVAL 501 and EVAL 505 and EVAL 520.
	Number and type of credits	3 hours lecture.
	Course Description	In this course students apply the principles and methods of program evaluation through a variety of applied activities that relate to pertinent topical areas
EVAL530	Course Description	in the educational, human services and public health fields. Through group and individual activities, students practice and refine skills in: identifying program goals and objectives; creating measurements for these goals, designing appropriate data collection instruments; analyzing and interpreting data; and using data to modify and improve programs. Students explore issues of program implementation and fidelity, working within local contexts and cultures, evaluation ethics, and managing competing expectations.
EXSC151	Title	Yoga, Relaxation and Stress Reduction.
	Number and type of credits	1.5 hours lab.
	Course Description	Provides for the development of basic skills in the performance and teaching of hatha yoga and basic neuromuscular relaxation. Each student will be able to plan and implement stress reduction programs for individuals in a one-to-one counseling situation and teach sessions in a classroom format.
EXSC231	Title	Previous course PEMJ 151 effective through Winter 2012. Fitness Assessment and Exercise Prescription.
	Prerequisites	PEMJ 131 and Exercise Science (ESCI) majors only and departmental approval.

	Special Fee	Special fee.
	Number and type of credits	3 hours lecture, 1.5 hours lab.
	Course Description	This course provides the student with the knowledge and basic skills necessary to effectively perform a variety of fitness evaluations prior to the development of individualized exercise recommendations tailored to the needs and goals of each client. Students will be exposed to all aspects of equipment and instrumentation commonly used in the fitness industry to determine cardiovascular and neuromuscular fitness. In addition, assessment protocols for estimating body composition and flexibility will also be reviewed. Meets the University Writing Requirement for majors in Exercise Science. Previous course PEMJ 231 effective through Winter 2012.
EXSC233	Title	Leadership in Aerobic Exercise.
	Prerequisites	PEMJ 131; and Exercise Science (ESCI), Physical Education w/ conc: Adult Fitness (PEAF) majors only and departmental approval.
	Number and type of credits	2 hours lecture, 2 hours lab.
	Course Description	Students will acquire skills in performing, demonstrating, and teaching aerobic activities. Previous course PEMJ 233 effective through Winter 2012.
EXSC234	Title	Leadership in Anaerobic Exercise.
	Prerequisites	PEMJ 131 and Exercise Science (ESCI) majors only and departmental approval.
	Number and type of credits	2 hours lecture, 1 hour lab.
	Course Description	Students will acquire skills in performing, demonstrating, and teaching strength training and anaerobic conditioning. Previous course PEMJ 234 effective through Winter 2012.
EXSC300	Title	Seminar I in Exercise Science.
	Prerequisites	EXSC 231 and EXSC 233 and EXSC 234 and Exercise Science (ESCI) majors only and departmental approval.
	Number and type of credits	2 hours lecture.
	Course Description	This course provides the student with the knowledge and basic skills necessary to evaluate potential career choices in the exercise science and fitness industries. Students will visit and observe a variety of fitness related work sites and then apply this knowledge as they engage in real and practical leadership experiences while under the supervision of a fitness professional.
EXSC420	Title	Theories in Strength and Conditioning.
	Prerequisites	PEMJ 320 and PEMJ 321; and Exercise Science (ESCI) majors only and

	Number and type of credits	departmental approval.
	Course Description	3 hours lecture. An advanced course about the scientific principles, concepts, and theories of strength training and conditioning and their application to athletic performance. Students examine the effects of both acute and chronic anaerobic
EXSC420	Course Description	training on several physiological systems. Students also investigate the bioenergetics, biomechanics, and administrative concerns of anaerobic training. Additionally, students analyze the effects of age, sex, performance-enhancing substances, nutrition, and psychology on athletic performance.
EXSC430	Title	Exercise for Special Populations.
	Prerequisites	PEMJ 320 and Exercise Science (ESCI) majors only and departmental approval.
	Number and type of credits	3 hours lecture.
	Course Description	This course provides the student with the knowledge to 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). Emphasis is placed on preparing students to develop safe and effective exercise programs for individuals with special needs.
EXSC475	Title	Foundations and Practices in Cardiac Rehabilitation.
	Prerequisites	PEMJ 320 and Exercise Science (ESCI) majors only and departmental approval.
	Special Fee	Special fee.
	Number and type of credits	3 hours lecture.
	Course Description	This course provides the student with the knowledge and basic skills necessary for patient care in a cardiac rehabilitation setting. Students examine the underlying pathology of coronary disease and learn to apply concepts of exercise testing and exercise prescription to patients in this population. Substantial time is allotted to developing student competences in electrocardiographic interpretation necessary for patient monitoring during exercise. Previous course PEMJ 375 effective through Winter 2012.

EXSC476	Title Prerequisites Number and type of credits Course Description	Seminar II in Exercise Science. EXSC 300 and EXSC 420 and EXSC 430 and EXSC 475 and Exercise Science (ESCI) majors only and departmental approval. 3 hours lecture. This course is specifically designed to allow the Exercise Science major to synthesize information from a series of background topics. Presented in a seminar format, this course will include discussions regarding: the role of the exercise practitioner, critical health issues as they relate to exercise, evaluation of criteria for individual and group exercise programs in a variety of settings, individual factors which influence participation and adherence to exercise programming and professional preparation for employment in health and fitness industry.
EXSC480	Title Prerequisites Special Fee Number and type of credits Course Description	Internship in Exercise Science. EXSC 300 and EXSC 476; Exercise Science (ESCI) majors only and departmental approval. Special fee. 8 hours internship. The internship offers the student an opportunity to work as a trainee with professionals in organizations and/or agencies. Previous course PEMJ 380 effective through Winter 2012.
FCST100	Title Number and type of credits Course Description	Professional Orientation. 2 hours lecture. Orientation to the philosophy of the profession. Field experiences in a variety of settings to provide exposure to the breadth of professional opportunities.
FCST120	Title Number and type of credits Course Description	Mindfulness: Theory, Research and Practice across the Life Course. 3 hours lecture. In this course, students study the practice of mindfulness for stress
FCST120	Course Description	reduction. They practice and use mindfulness practice to reduce emotional distress and promote positive states of mind in their individual and family life, and work settings. Students examine current work in the fields of neuroscience, family and child studies, health, medicine, psychology, and