Exercise Science and Technology (EXL)

Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.

EXL 1500  Introduction to Exercise Leadership ..........4 Credit Hours
English/ESL Placement: Placement into ENG 1510.
This course provides guided training in leading group exercise. It emphasizes prevention of injury, use of music, dance, and rhythms, and experience with fitness equipment. It also involves leading and programming, chair exercise, interval, and circuit routines. BILLABLE CONTACT HOURS: 4

EXL 1600  Theory and Practice of Resistance Training ....................................................1 Credit Hour
English/ESL Placement: Placement into ENG 1510.
This course will discuss the theory and practice of resistance training using a variety of modalities, i.e., free weights, weight machines, resistance bands, medicine balls, etc. Discussion will include the anatomical and physiological adaptation to resistance training. Practice will include proper technique, spotting and coordinating/implementing resistance training programs. Different settings (i.e., home versus club) will also be addressed. BILLABLE CONTACT HOURS: 1

EXL 2010  Exercise Physiology .............................4 Credit Hours
Equivalent: EXL 1510
English/ESL Placement: Placement into ENG 1510.
Prerequisite: BIO 1600 or BIO 2630 and BIO 2640
Note: Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.
This course is designed to instruct the students in programming safe and effective exercise for participants with medically controlled physical conditions which require a physician's diagnosis and prescription for an exercise regime. The student will learn principles of exercise programming for the obese, diabetic, COPD patient, arthritic, etc. BILLABLE CONTACT HOURS: 3

EXL 2020  Testing and Measurement in Exercise Physiology ....................................................3 Credit Hours
Equivalent: EXL 1520
English/ESL Placement: Placement into ENG 1510.
Prerequisite: EXL 2010
Note: Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.
This course will present a survey of current methods of assessing fitness levels and a survey of the literature. Laboratory sessions will provide experience with a variety of equipment for assessing strength, flexibility, reaction time, oxygen consumption, blood pressure, heart rates, respiratory capacity, and body composition. BILLABLE CONTACT HOURS: 3

EXL 2032  Kinesiology ..............................................4 Credit Hours
Equivalent: EXL 2031, EXL 2030
English/ESL Placement: Placement into ENG 1510.
Prerequisite: BIO 1600 or BIO 2630 and BIO 2640
Note: Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.
The course is designed to introduce the student to the fundamentals of kinesiology and basic biomechanics. The student will study the classification of joints, orientation positions, planes and axes of the body, movement terminology, and muscle location. The course will also instruct the student on the relationship between anatomical structure and function with special emphasis placed on range of motion, strength, and speed.
BILLABLE CONTACT HOURS: 4

EXL 2040  Applied Exercise Physiology for Individuals With Disease and Disability ...............................3 Credit Hours
English/ESL Placement: Placement into ENG 1510.
Prerequisite: EXL 2010
Note: Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.
Corequisite: EXL 2032
This course is designed to instruct the students in programming safe and exercise in adults. Nutritional considerations in exercise rehabilitation of cardiacs, diabetics, and others will be investigated. The student will inquire into the effects of specialized diets on athletic performance. The student will study obesity and weight control using diet and exercise. The student is expected to exercise in class. BILLABLE CONTACT HOURS: 3

GE Outcomes: Personal Development

EXL 2100  Health Promotion At the Worksite ............2 Credit Hours
English/ESL Placement: Placement into ENG 1510.
Prerequisite: EXL 2040
Note: Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.
This course is designed to acquaint the student with the process of developing, implementing, and evaluating a health promotion program. The course will include such concepts as how to develop health promotion plans for a worksite, how to set realistic goals and expectations, and how to critique health education material on the market. BILLABLE CONTACT HOURS: 2
EXL 2120  Applied Psychological Aspects of Fitness and Sports

Credit Hours: 3

English/ESL Placement: Placement into ENG 1510.

Prerequisite: PSY 2510

Note: Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.

Human behavior, psychology and motivation principles of fitness and sports will be examined as they apply to recreational exercisers, athletes and individuals with health problems. Emphasis will be placed on emotional health, positive lifestyle strategies, adherence factors and personal development of recreational exercise; with special topics covering the psychological effects of exercise on chronic pain, anxiety, depression and sport injury. The course also will cover behavioral aspects of competition anxiety analysis and management, mental rehearsal techniques, and aggression control. BILLABLE CONTACT HOURS: 3

EXL 2200  Essentials of Personal Training

Credit Hours: 3

English/ESL Placement: Placement into ENG 1510.

Prerequisite: EXL 1500 EXL 2010 EXL 2020 EXL 2032 EXL 2040

Note: Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.

This course is designed to present the practical aspects of personal training and exercise instruction. Key components of the course include fundamentals of exercise prescription and program design, business issues of personal training, certifications, and elements related to becoming a successful and responsible personal trainer. BILLABLE CONTACT HOURS: 3

EXL 2400  Internships in Exercise

Credit Hours: 4

English/ESL Placement: Placement into ENG 1510.

Prerequisite: EXL 2032 and EXL 2040 or consent of instructor

Note: Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.

Students will be assigned to affiliated health facilities for 158 clock hours of experience in exercise programming and leadership. A one and one-half hour weekly seminar is a course requirement. BILLABLE CONTACT HOURS: 4

EXL 2532  Internship of Exercise II: Special Topics

Credit Hours: 4

English/ESL Placement: Placement into ENG 1510.

Prerequisite: EXL 1500 EXL 2020 EXL 2032 and EXL 2040

Note: Prerequisites for courses in this department are not automatically waived for College Guest students and students with a bachelor's degree or higher from a U.S. institution.

Students will be assigned to an affiliated health and fitness facility for applied experience in areas such as cardiovascular rehabilitation, senior fitness, or other special areas. Weekly seminars will discuss topics related to internship site, i.e., cardiovascular risk and conditioning, nutrition, blood pressure control, stress management, and smoking cessation. BILLABLE CONTACT HOURS: 4