

BERGEN COMMUNITY COLLEGE
Division of Arts Humanities & Wellness
Wellness Exercise Science Department
Departmental Policy Syllabus

COURSE TITLE:	Weight Training (formerly WEX-206)
COURSE CREDITS/HOURS	2 labs; 1 credit
PREREQUISITE:	None
SEMESTER & YEAR:	All
COURSE NUMBER:	WEX-116

COURSE DESCRIPTION:

Weight Training is an application of the theories explored in WEX-101. The course is designed to effect changes in muscular strength and endurance through a variety of appropriate training techniques and applications. The development of personal exercise regimens for life-long participation is emphasized.

OUTCOMES STATEMENT:

The student shall demonstrate knowledge of this exercise mode and personal behavior that engages physical activity to the extent that creation and maintenance of optimal fitness levels can contribute to lifelong well-being.

STUDENT LEARNING OBJECTIVES

- A. To explore proper biomechanics in a variety of machines and free weights used in weight training.
- B. To understand the manipulations of exercise variables that affect muscular strength; muscular endurance; and/or hypertrophy.
- C. To set objectives, monitor progress and evaluate results relative to individual needs and goals.
- D. To explore the relationship of weight training relative to its effect on body composition.
- E. To investigate the role of nutrition in weight training.

ASSESSMENT CRITERIA

- A. To demonstrate proper biomechanics for a variety of multi-joint and single-joint exercises.
- B. To demonstrate physically and/or in writing program design variables to elicit specific training outcomes i.e. muscular endurance; muscular strength and/or hypertrophy.
- C. To record each weight training session's data for the purpose of analysis relative to progress within the prescribed program.
- D. To list and describe the beneficial effects of weight training on fitness/health.
- E. To demonstrate the beneficial effects of nutrition on weight training.

CONTENT OUTLINE

- I. Equipment review
 - A. Machines – aerobic; anaerobic
 - B. free weights, dumbbells and the proper biomechanics involved.
 - C. Stability ball; tubes/bands

- D. Spotting; safety concerns
- II. Application of exercise variables
 - A. Intensity
 - B. Frequency
 - C. Duration
 - D. Sets, Reps, Resistance
- III. Selection of Exercises
 - A. Muscle balance
 - B. Single joint, multi joint
 - C. Number of exercises
 - D. Exercise sequence
 - E. Free weights or machines: the advantages of each
- IV. Program Design variables
 - A. Manipulation of training variables
 - 1. Sets and reps
 - 2. Proper resistance
 - 3. Rest & recovery
 - B. Periodization
- V. Physiological Considerations
 - A. Muscle structure
 - B. Contraction types
 - 1. Concentric
 - 2. Eccentric
 - C. Hypertrophy, Endurance, Power
 - D. Factors affecting Change
 - 1. Genetics
 - 2. Nutrition
 - 3. Fiber type
 - 4. Fiber number
 - E. Cardiovascular system
 - 1. Use of circuit weight training
 - 2. Effect of weight training
 - F. Nutrition considerations
 - 1. Caloric expenditure & intake
 - 2. Losing weight
 - 3. Gaining weight
 - 4. Motivating fat loss
 - G. Health benefits of weight training
 - 1. Metabolic effects
 - 2. Osteoporosis
 - 3. Frailty (activities of daily living)
 - 4. Body composition impact

WRITING REQUIREMENTS

Students will be assigned out-of-class writing projects during the course of the semester (journals, self-assessments, research papers, book reviews, etc.). The number of assignments and their content will be exclusive of writing essay (required on examinations).

GRADING POLICY

A final grade for the course is based on the student's performance on the required work for the course (writing assignments, examinations, quizzes, class presentations, attendance, etc.) and on his or her mastery of the material covered in the course. A student's participation may also be evaluated and used in the determination of a final grade.

ATTENDANCE POLICY

Students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of the course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

RULES & REGULATIONS

At the beginning of the academic year, each student is expected to obtain a copy of the College Catalog, Student Handbook, and the Academic Calendar. The catalog contains information about the regulations and procedures essential to student life on campus. Every student is responsible to be aware of information included in the catalog and student handbook regarding conduct, academic integrity, appropriate use of technology, etc.

ACADEMIC & STUDENT FACILITIES

Students are referred to the College Catalog which contains a complete listing and description of available facilities and services including but not limited to: the Silverman Library, Office of Specialized Services, Bookstore, Graphics lab, Tutoring Center, Athletic and Exercise facilities, etc.

RESOURCES/FACILITIES

- A. Fitness Centers (G-032 & S-128)
- B. Par course
- C. Track
- D. Sidney Silverman Library

RECOMMENDED TEXTBOOK:

Bachle, T and Groves, B. Weight /training – Steps to Success, Human Kinetics: Leisure Press.

PROPOSED COURSE CALENDAR

Readings Appropriate
selections pertaining to class
activity

Week 1	Orientation and procedures; requirements Grading; Introduction to equipment
Week 2	Using aerobic and anaerobic modalities Learning to use the machines; determining training weights; multi & single joint movements
Week 3	Program design – sets, reps, resistance; selecting warm-up, cool-down exercise safety.

Week 4	Exercise routines; discuss nutrition Concepts for gaining/losing weight
Week 5	Introduction to free weights and related exercises. Introduce periodization concepts
Week 6	Practice exercise routines using machines, free weights or a combination
Week 7	Complementary exercises – stability ball; core training; floor exercises
Week 8	Practice exercise routines; discuss spotting Safety & techniques
Week 9	Introduce various protocols – pyramid, super setting, forced reps, eccentric emphasis
Week 10	Use of selected protocols for exercise routine – strength, hypertrophy, endurance
Week 11	Exercise routines with selected protocol; discussion of overload principle
Week 12	Practice exercise routines with selected protocol; discuss long-term benefits of weight training
Week 13	Introduce circuit weight training and discuss benefits
Week 14	Practice exercise routines with selected protocol
Week 15	Summative comments; examination

Course sequence and content are subject to change without notice as emphasis on course content may vary.

Revised August 2014