

Montgomery County Community College
 ESW 106
 Aerobics
 2-1-2

COURSE DESCRIPTION:

This course is designed to provide an overview of the theory of aerobic exercise and a selection of aerobic activities and exercises that will develop the student to a higher level of physical fitness with a working knowledge of the principles of exercise. Discussions will deal with such topics as cardiovascular endurance, muscular strength, neuromuscular coordination, flexibility, warm-up, workout progression, cool down, and body nutrition for performance. This course is subject to a course fee. Refer to <http://mc3.edu/adm-fin-aid/paying/tuition/course-fees> for current rates.

REQUISITES:

Previous Course Requirements

None

Concurrent Course Requirements

None

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Describe the value and effect of aerobic activity on total well being.	Participate in Various Aerobic Activities Fitness Assessments Demonstration Presentations Research Project Lecture/Class Discussions Written Assignments Group Projects Written Exams Case Study	Exam Case Study
2. Identify the anatomical physiological and psychological issues that affect aerobic fitness in men and women.	Participate in Various Aerobic Activities Fitness Assessments Demonstration Presentations Research Project Lecture/Class Discussions Written Assignments Group Projects Written Exams	Exam Case Study

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
3. Practice body movements for the components of physical fitness such as flexibility, strength, and cardio endurance.	Participate in Various Aerobic Activities Fitness Assessments Demonstration Presentations Lecture/Class Discussions Group Projects	Skill Assessments Fitness Assessments Create an Aerobic Routine
4. Demonstrate proper body mechanics and techniques during all forms of aerobic exercise such as step aerobics, low impact aerobics, muscle toning with and without free weights.	Participate in Various Aerobic Activities Fitness Assessments Demonstration Presentations Research Project Lecture/Class Discussions Group Projects	Skill Assessments Fitness Assessments Create an Aerobic Routine Presentations
5. Create an individualized aerobic workout.	Participate in Various Aerobic Activities Fitness Assessments Demonstration Presentations Research Project Lecture/Class Discussions Group Projects	Create an Aerobic Routine
6. Assess ways to monitor immediate and long-range progress in aerobic exercise programs.	Participate in Various Aerobic Activities Fitness Assessments Demonstration Presentations Research Project Lecture/Class Discussions Written Assignments Group Projects Written Exams Case Study	Fitness Assessment Case Study Exam
7. Develop a higher level of fitness through aerobic exercise.	Participate in Various Aerobic Activities Fitness Assessments Demonstration Presentations Research Project Lecture/Class Discussions Group Projects	Fitness Assessment Create an Aerobic Routine

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
8. Explain the role of proper diet and good eating habits for peak performance in daily exercise.	Fitness Assessments Research Project Lecture/Class Discussions Written Assignments Written Exams Case Study	Exam Case Study
9. Consistently demonstrate safety factors and proper use of equipment necessary to participate in aerobic activities.	Participate in Various Aerobic Activities Fitness Assessments Demonstration Presentations Research Project Lecture/Class Discussions Written Assignments Group Projects Written Exams	Exam

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria*.

SEQUENCE OF TOPICS:

- A. Introduction
 1. positive mindset for fitness
 2. definition of aerobics
 3. aerobics and total well-being
- B. Physiological Bases of Aerobic Activity
 1. cardiovascular system
 2. respiratory system
 3. muscular system
 4. nervous system
 5. anatomical considerations
 6. body composition
- C. Assessment and Evaluation
 1. flexibility test
 2. strength test
 3. cardiorespiratory test
 4. skinfold test
 5. blood pressure
 6. heart rate

- D. Principles of Training
 - 1. goals
 - 2. assessment
 - 3. motivation
 - 4. progression
 - 5. overload
 - 6. specificity
 - 7. frequency, intensity, time/duration
 - 8. warm up and cool down
 - 9. proper equipment and dress
 - 10. various types of activity
 - 11. use/disuse
 - 12. reversibility
 - 13. safety and prevention of injury
- E. Program Guidelines
 - 1. warm up and stretch
 - 2. aerobic workout
 - 3. strength training
 - 4. Cool down, flex, and relax
- F. Aerobic Activities
 - 1. step training
 - 2. low impact aerobics
 - 3. free-weights
 - 4. pace walk
 - 5. rope jump
 - 6. muscle toning
 - 7. jogging
- G. Choreography
 - 1. goal
 - 2. movements
 - 3. methods
 - 4. routine
 - 5. equipment
- H. Nutrition for Performance
 - 1. water
 - 2. minerals
 - 3. vitamins
 - 4. carbohydrates, protein, fat
- I. Body Mechanics
 - 1. proper technique
 - 2. stability and balance
 - 3. giving force to self
 - 4. receiving force of self

- J. Benefits of Aerobic Programs
1. increased productivity
 2. more self-confidence
 3. body weight management
 4. increased strength
 5. increased cardio endurance
 6. reduced stress level
 7. more efficient digestion
 8. more personal energy
 9. slow aging process
 10. ease of movement

LEARNING MATERIALS:

No textbook is required. Supplemental information is provided to the students by the instructor.

Learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

COURSE APPROVAL:

Prepared by: John Flynn	Date: 8/1998
Revised by: Dr. Anne Livezey	Date: 2/2009
VPAA/Provost Compliance Verification: Dr. John C. Flynn, Jr.	Date: 9/11/2009

Revised by: Dr. Anne Livezey	Date: 6/2012
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 6/18/2012

Revised by: Dr. Anne Livezey	Date: 12/2012
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 1/3/2013

Revised by: Dr. Anne Livezey	Date: 12/20/2017
VPAA/Provost or designee Compliance Verification:	Date: 1/10/2018



This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.