



**COWLEY COLLEGE
& Area Vocational Technical School**

COURSE PROCEDURE FOR

**AEROBIC DEVELOPMENT FOR THE CARDIOVASCULAR SYSTEM
ALH6399 1 Credit Hour**

Student Level:

This course is open to students on the college level in either the freshman or sophomore year.

Catalog Description:

ALH6399 - AEROBIC DEVELOPMENT FOR THE CARDIOVASCULAR SYSTEM (1 hr)

This course is designed to prepare student to accurately assess their current fitness level in a variety of areas of physical fitness. Students will practice interpreting and applying the results of these assessments for the purpose of exercise prescription/programming. Each student will design a training program that increases long-term aerobic development.

Prerequisites:

None.

Controlling Purpose:

This course is designed to provide the student with an opportunity to become more aware of his or her own level of physical fitness/wellness while designing and applying that awareness to application of fitness/wellness to increase their cardiac output.

Learner Outcomes:

Upon completion of the course, the student will have developed a personal training program that improves that student's current fitness level. After gaining knowledge of scientific background and understanding of some of the physiological functions of the body and the student will piece together a training regimen that will improve their fitness level to that of their need. The student will also understand how much of this information has been obtained, its accuracy, and possible errors so that improvement of their individualized program can be made for future improvements.

Units Outcomes and Criterion Based Evaluation Key for Core Content:

The following defines the minimum core content not including the final examination period. Instructors may add other content as time allows.

Evaluation Key:

A = All major and minor goals have been achieved and the achievement level is considerably above the minimum required for doing more advanced work in the same field.

- B = All major goals have been achieved, but the student has failed to achieve some of the less important goals. However, the student has progressed to the point where the goals of work at the next level can be easily achieved.
- C = All major goals have been achieved, but many of the minor goals have not been achieved. In this grade range, the minimum level of proficiency represents a person who has achieved the major goals to the minimum amount of preparation necessary for taking more advanced work in the same field, but without any major handicap of inadequacy in his background.
- D = A few of the major goals have been achieved, but the student's achievement is so limited that he is not well prepared to work at a more advanced level in the same field.
- F = Failing, will be computed in GPA and hours attempted.
- N = No instruction or training in this area.

UNIT 1: INTRODUCTION TO THE PRINCIPLES OF TRAINING						
Outcomes: The student will gain an understanding of how the human body adapts to training while stressing the aerobic energy system.						
A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Understand the principles related to the training process.
						Identify the principles related to the long-term development of the individual.
						Appreciate principles of training related to the individual.
						Explain some of the common fallacies of training.
UNIT 2: ASSESSING ENERGY FITNESS						
Outcomes: The student will understand the basic knowledge for the energy systems that they plan to train.						
A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Determine the energy systems used while training.
						Understand how to evaluate an individual's energy capabilities.
						Identify ways to assess aerobic energy.
						Develop field tests to assess individual capabilities as well as the effects of training.
						Understand the need to utilize sport-specific assessment techniques.
UNIT 3: DEVELOPING ENERGY FITNESS						
Outcomes: The student will gain an understanding on how to develop his/her own fitness.						
A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Understand how to develop short-term anaerobic systems.
						Determine the types of training used to develop long-term aerobic systems.
						Identify the cellular changes that occur with different activity intensities and

							durations of training.
							Appreciate the changes in the cardiovascular system that affect aerobic fitness.
UNIT 4: MUSCULAR FITNESS TRAINING							
Outcomes: The student will have the knowledge on the type of muscular training best suits their training needs.							
A	B	C	D	F	N		Specific Competencies
							Demonstrate the ability to:
							Explain how muscles function.
							Describe muscle fiber types.
							Develop the components of muscular fitness.
							Identify appropriate test for individuals.
UNIT 5: DEVELOPING TRAINING PROGRAMS							
Outcomes: The student will be able to develop a training program to satisfy his or her personal training needs.							
A	B	C	D	F	N		Specific Competencies
							Demonstrate the ability to:
							Understand how to apply the principles of training to program design.
							Modify a four-step method training program to help one design a program based on athletic needs.
							Describe how one can adjust a training program, without causing injury, to more effectively meet needs.
							Appreciate the value of long-term record keeping in improving the individuals performances.

Projects Required:

Projects may vary according to the instructor.

Textbook:

Contact Bookstore for current textbook.

Materials/Equipment Required:

Computer and calculator.

Attendance Policy:

Students should adhere to the attendance policy outlined by the instructor in the course syllabus.

Grading Policy:

The grading policy will be outlined by the instructor in the course syllabus.

Maximum class size:

25

Course Time Frame:

The U.S. Department of Education, Higher Learning Commission and the Kansas Board of Regents define credit hour and have specific regulations that the college must follow when developing, teaching and assessing the educational aspects of the college. A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work for approximately fifteen weeks for one semester hour of credit or an equivalent amount of work over a different amount of time. The number of semester hours of credit allowed for each distance education or blended hybrid courses shall be assigned by the college based on the amount of time needed to achieve the same course outcomes in a purely face-to-face format.

Refer to the following policies:

[402.00 Academic Code of Conduct](#)

[263.00 Student Appeal of Course Grades](#)

[403.00 Student Code of Conduct](#)

Disability Services Program:

Cowley College, in recognition of state and federal laws, will accommodate a student with a documented disability. If a student has a disability which may impact work in this class and which requires accommodations, contact the Disability Services Coordinator.