

ASSOCIATE IN ARTS DEGREE

EXERCISE SCIENCE

TRANSFER PREPARATION * (MAJOR CODE: A1360)

Exercise science is the study of the processes through which individuals obtain optimal health, physical skills, and fitness. The academic foundation of exercise science is the study of human movement as it affects and is affected by physiological, psychological, developmental, sociocultural, and mechanical parameters.

While this program emphasizes preparation for the teaching career, the physical educator is prepared for a wide range of career opportunities in such fields as physical therapy, athletic training, recreation, research, and private fitness and health.

Program Student Learning Outcome Statement

- Learn how the body responds to exercise demands and the positive benefits, known as training effects, that can be achieved through healthy exercise habits.
- Differentiate between cardio-respiratory exercise and muscle strength and endurance exercise and how those components make up physical fitness.

FIRST SEMESTER

BIOL 100	Principles of Biology	3
BIOL 101	Principles of Biology Laboratory	1
ES/T 202	Introduction to Kinesiology	3

SECOND SEMESTER

BIOL 260	Human Anatomy	4
SOC 101	Introduction to Sociology	3

THIRD SEMESTER

CHEM 100	Introduction to General Chemistry	4
COMM 103	Oral Communication	3
Complete 1 unit from ES/Activity		1

FOURTH SEMESTER

BIOL 261	Principles of Human Physiology	4
PSYC 101	General Psychology	3
Complete 1 unit from ES/Activity		1

Total units 30

To earn an associate degree, additional general education and graduation requirements must be completed. See page 59.

- * Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education through consultation with a counselor in either the Counseling

Center or Transfer Center. See catalog TRANSFER COURSES INFORMATION section on page 43 for further information.

CERTIFICATES

FITNESS SPECIALIST CERTIFICATION—BASIC

CERTIFICATE OF PROFICIENCY

CAREER/TECHNICAL (MAJOR CODE: 01361)

The Fitness Specialist program is designed to train and qualify students to function as entry-level, intermediate, and advanced group exercise leaders and personal trainers. Students will learn the scientific principles of exercise and physical conditioning, techniques of exercise leadership with groups and individuals, assessment and establishment of healthy behaviors, nutrition and the designing of safe, effective, and personalized exercise plans for a variety of clients.

Program Student Learning Outcome Statement

- Create an effective and safe exercise program based on observation, client assessment and risk stratification to improve fitness level of target population.
- Learn teaching methodologies needed to implement exercise programs to target populations in various fitness settings.

HLTH 202	Nutrition for Athletes	3
ES/T 135	Introduction to Exercise Physiology	2
ES/T 136	Techniques of Weight Training	2
ES/T 137	Exercise for Special Populations	2
ES/T 138	Techniques of Exercise Leadership	2
ES/T 139	Fitness Specialist Internship	3
ES/T 140	Introduction to Applied Kinesiology	2

Total units 16

FITNESS SPECIALIST CERTIFICATION—ADVANCED

CERTIFICATE OF ACHIEVEMENT

CAREER/TECHNICAL (MAJOR CODE: 01362)

The Fitness Specialist program is designed to train and qualify students to function as entry-level, intermediate, and advanced group exercise leaders and personal trainers. Students will learn the scientific principles of exercise and physical conditioning, techniques of exercise leadership with groups and individuals, assessment and establishment of healthy behaviors, nutrition and the designing of safe, effective, and personalized exercise plans for a variety of clients.

Program Student Learning Outcome Statement

- Learn the aspects of a variety of diverse situations in the fitness setting with respect to CPR and first aid, risk assessment and basic protocol of injury management.
- Learn teaching methodologies needed to implement exercise programs to target populations in various fitness settings.
- Create an effective and safe exercise program based on observation, client assessment and risk stratification to improve fitness level of target population.

GAINFUL EMPLOYMENT:

The U.S. Department of Education requires colleges to disclose a variety of information for any financial aid eligible program that "prepares students for gainful employment in a recognized occupation."

Students who complete this program will have acquired the necessary analytical tools to successfully secure gainful employment in the field of study.

For more information regarding the data provided for this program and what it means to you as a student, please feel free to visit our SWC Gainful Employment website at: www.swccd.edu/gainfulemployment

HLTH 110	First Responder	3
HLTH 202	Nutrition for Athletes	3
ES/T 107	Fitness Assessment and Laboratory	2.5
ES/T 135	Introduction to Exercise Physiology	2
ES/T 136	Techniques of Weight Training	2
ES/T 137	Exercise for Special Populations	2
ES/T 138	Techniques of Exercise Leadership	2
ES/T 139	Fitness Specialist Internship	3
ES/T 140	Introduction to Applied Kinesiology	2
ES/T 250	Prevention and Care of Athletic Injuries	2

Total units **23.5**

FIRE SCIENCE TECHNOLOGY

HIGHER EDUCATION CENTER AT OTAY MESA

DEAN Silvia Cornejo, M.A., Office 4118D, 619-216-6755

FACULTY Kevin Roof, B.A.

DEPARTMENT CHAIR Gary Creason, M.S.

GENERAL DESCRIPTION

Today, fire service personnel are faced with a diverse and complex environment. Fire fighters must possess sufficient knowledge and skills to deal effectively with the fire protection problem, emergency medical care response, and hazardous materials. The study of fire

science includes the philosophy, history, chemistry, physics, laws, terminology, technology and detection, and prevention of fires.

CAREER OPTIONS

Below is a sample of the career options available to the fire science major. Most require a certificate of achievement or an associate in science degree and graduation from a fire academy. Positions are available in state and federal agencies and private industry. Careers in fire protection include public fire service, fire protection and engineering, and education. Openings occur each year in fire service and related fields for men and women who possess the proper education and qualifications.

DEGREE/CERTIFICATE OPTIONS MAJOR CODE

Associate in Science Degree: Career/Technical

Fire Science Technology 02845

Certificate of Achievement

Fire Science Technology 02846

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

ASSOCIATE IN SCIENCE DEGREE FIRE SCIENCE TECHNOLOGY

CAREER/TECHNICAL (MAJOR CODE: 02845)

Provides training in the theory and practice of fire technology, the fire service, and the fire protection field. It is designed to enhance qualifications for entry into the fire service, for preparation for entry-level hiring examinations, and for current firefighters wishing to complete a degree in fire technology.

Program Student Learning Outcome Statement

- Demonstrate proficiency in multi-faceted communication skills, assessment of the problem(s), and interpretation of information and make judgments related to hazardous emergencies, medical emergencies, and fire (potential/actual) incidents.
- Demonstrate proficiency in all aspects of basic firefighter emergency responses as related to investigation and mitigation of the situation.
- Demonstrate proficiency in working collegially with a diverse population in stressful environments in the basic firefighter role.