

Exercise Science

School of Health, Exercise Science and Athletics

Dean Terry Davis, M.H.A., Office 1000K, 619-482-6551

Faculty Duro Agbede, Ph.D.; Edward A. Carberry, M.A.; John D. Cosentino, M.A.; Paul M. Daniels, M.A.; Karen Cravens, M.A.; Melanie Durkin, M.A.; Robert Flores, M.A.; Valerie Goodwin, M.Ed.; Jennifer Harper, M.A.; Gloria Johnson, M.A.; Walt Justice, M.A.; Dionicio Monarrez, M.Ed.; Michael Meehan, M.Ed.; Michael Pompa, M.A.; Art Stone, M.A.; Mustafa Tont, M.A., M.Ed.

Department Chair Karen Day Cravens, M.A.

General Description

Exercise Science is an academic area of study concerned with the art and science of physical movement. This department explores the processes through which individuals obtain optimal health, physical skills, and fitness. Learning concentrates on human movement as it affects and is affected by physiological, psychological, cultural, social, and mechanical parameters. The application of movement concepts evolves from a foundation in human anatomy, physiology, and principles of kinesiology that cover healthful living, nutrition, and emergency practices.

Career Options

Below is a sample of the career options available for the exercise science major. A few of these require an associate degree, most require a bachelor's degree, and some require a graduate-level degree: athletic trainer, high school or college instructor, coach, corrective therapist, exercise test technologist, sports medicine doctor, recreation specialist, community center leader, personal trainer, rehabilitation technician, sportscaster, referee, resort sports coordinator, and sports club manager or personnel, exercise physiologist and physical therapist.

Degree/Certificate Options

	Major Code
Associate in Arts Degree: Transfer Preparation	
Exercise Science	A1360
Certificate of Achievement	
Fitness Specialist Certification—Advanced	01362
Certificate of Proficiency	
Fitness Specialist Certification—Basic	01361

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

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.

First Semester

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

Second Semester

BIOL 260	Human Anatomy	5
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 **31**

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

* 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 33 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.

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.

HLTH 110	First Responder	3
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
ES/T 250	Prevention and Care of Athletic Injuries	2
Total units		21

Fire Science Technology

Higher Education Center at Otay Mesa

Dean Silvia Cornejo, M.A., Office 4118D, 619-482-6755

Faculty Richard Sherard, A.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

Associate in Science Degree: Career/Technical

	Major Code
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.

