

# ENVIRONMENTAL TECHNOLOGY

DIVISION OF MATHEMATICS & SCIENCES

FOR GREEN ENERGY AND ALTERNATIVE ENERGY TECHNOLOGY PLEASE SEE ELECTRONICS

## ET 110 HAZARDOUS WASTE GENERATION/REDUCTION/TREATMENT

3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment, and MATH 050 or appropriate assessment.

Transfers to: CSU

This course is designed to educate individuals working in or seeking employment in the hazardous waste management field with an overview of industrial processes and their generation of waste streams. The selected industries include: electroplating, metal finishing and printed circuit board production; oil refining and chemical production; steel production; general manufacturing; printing and graphic production; agriculture; and consumer services.

★ 0041 W 7:00-10:10 PM HERNANDEZ E Rm S121

## ET 260 ENVIRONMENTAL SAMPLING AND ANALYSIS

4 Units/Advisory: ENGL035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment, MATH 050 or appropriate assessment, CHEM 110, BIOL 120 and BIOL 120L.

Transfers to: CSU

This course provides an overview of the techniques of sampling protocols for obtaining soil, air, surface water, and groundwater samples based on the U.S. EPA approved sampling protocols. In the lecture, emphasis is placed on the aspects of the procurement of the samples through the EPA approved standard operating procedures and practices. In the laboratory, the student will gain practical knowledge and skills for the appropriate collection and handling of environmental samples.

★ 0045 M(Lec) 7:00-10:10pm EARLEY J Rm S121  
W(Lab) 7:00-10:10pm EARLEY J Rm S129

## ET 271 WASTEWATER TREATMENT PLANT OPERATIONS II

3 Units/Prerequisite: ET 270.

Advisory: MATH 020 or appropriate assessment, ENGL 035 or ESL 198 or appropriate assessment, and READ 023 or appropriate assessment.

Transfers to: CSU

This is the second course of a series of water treatment courses designed to train individuals, who are working in or who seek employment in the wastewater treatment field, with the practical aspects of operating and maintaining wastewater treatment plants, emphasizing the use of safe practices and procedures. Information presented includes: conventional activated sludge processes, sludge digestion and solids handling, effluent disposal, plant safety and good housekeeping, plant and equipment maintenance, analysis and presentation of data, and records and report writing. Students will also learn to analyze and solve operational problems and to perform mathematical calculations relating to wastewater treatment process control.

★ 0227 T 7:00-10:10 PM SHIMOKOCHI R Rm S121

## ET 290 COOPERATIVE WORK EXPERIENCE/INTERNSHIP FOR ENVIRONMENTAL TECHNOLOGY RELATED FIELDS

1-4 Units/Advisory: READ 023 or appropriate assessment; ENGL 035 or ESL 198 or appropriate assessment.

Transfers to: CSU

This course supports and reinforces on-the-job training in business and industrial establishments under supervision of a college instructor and is facilitated by the use of learning objectives. The student will be working in a skilled or professional level assignment in their area of vocational interest and will meet performance objectives related to instruction that are above and beyond the conditions of regular employment. This course is intended for students whose job is related to the field of environmental technology and have completed or enrolled in the appropriate coursework. This course may be taken once and repeated three times for credit.

For more information contact the instructor at [gduran@riohondo.edu](mailto:gduran@riohondo.edu)

0052 TBA Times to be arranged \*1 unit DURAN G Rm TBA  
0054 TBA Times to be arranged \*2 units DURAN G Rm TBA  
0055 TBA Times to be arranged \*3 units DURAN G Rm TBA  
0057 TBA Times to be arranged \*4 units DURAN G Rm TBA

Student Unpaid Internship: 1 Unit/60 hours; 2 Units/120 hours; 3 Units/180 hours; 4 Units/240 hours

Student Paid Internship: 1 Unit/75 hours; 2 Units/150 hours; 3 Units/225 hours; 4 Units/300 hours

★ = Evening ☞ = Online/Hybrid Classes

# FIRE TECHNOLOGY

DIVISION OF PUBLIC SAFETY

STUDENTS SHOULD BE AWARE THAT BASIC FIRE TECHNOLOGY TRAINING CLASS FAC118 REQUIRES ARDUOUS PHYSICAL TRAINING. Entrance into the academy is on a priority basis. Information regarding the priority system is available in the Counseling Office or the Santa Fe Springs Regional Training Center. Students cannot register for the Fire Academy by mail or by phone. Applications for the Academy must be filed at the 11400 Greenstone Ave., Santa Fe Springs between Oct 1st - Nov 16th, 2009.

### ACADEMY CLASS #74

APPLICATIONS: 10/1/2009 – 11/16/2009

REGISTRATION: 1/13/2010

INSTRUCTION BEGINS: 1/19/2010

GRADUATION: 5/15/2010

Family Day- 1/9/2010 @ 10:00 am

PHYSICAL ABILITIES TEST- Mandatory for all who apply- 12/05/2009 @ 0800

### FULL TIME FIRE ACADEMY

FULL TIME ACADEMY- EMT 093 IS A PRE-REQUISITE

You must have at least a national registry card/taking EMT during the summer at Rio Hondo does not qualify.

## FAC 118 FIREFIGHTER I, BASIC FIRE ACADEMY

17 Units/Prerequisite: READ 023 or appropriate assessment, ENGL 035 or ESL 198 or appropriate assessment, MATH 030 or appropriate assessment, FTECH 101, FTECH 103, FTECH 104, FTECH 105, FTECH 106, EMT 093. Advisory: BIOL 125.

Transfers to: CSU-Restricted (see counselor for restrictions)

This course is designed for recently employed firefighters and other interested students. Topics covered include organization of the public and private fire service, characteristics and behavior of fire, fire hazards and firefighter safety, extinguishing agents and related extinguishing equipment, fire protection systems and water supply, incident command system, confine space awareness, building construction and assemblies, basic fire fighting tactics and strategy, fire prevention, hazardous materials, emergency care, wild land firefighting, Rapid Intervention, Rescue Systems and physical fitness. This course meets the State Board of Fire Services requirements for designation as a "California Fire fighter I Accredited Academy" (ARA or Accredited Regional Academy by the California State Fire Marshal). Students who complete this course also receive California certification as an Emergency Medical Technician, Vehicle Extrication, Fire Control I & II, Hazardous

Materials First Responder Operational, Confine Space Awareness, Rescue Systems I, S-130,S-190and ICS -200. This course may be taken once and repeated once for credit.

All sections of FAC 118 Basic Fire Academy have a materials fee of \$230.00 per ticket number.

1162 MTW 6:30AM-5:00PM RICKMAN T SFSTC

ThF FIRE ACADEMY CLASS #74 (Full Time Academy)

SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at 11400 Greenstone Ave., Santa Fe Springs, CA

### CAMPUS CLASSES

#### FIRE TECHNOLOGY INFORMATION MEETINGS

There is an orientation meeting held for the Fire Technology Program on the second Tuesday of every month at 6:30 pm. This meeting is for information only for those interested in the Fire Academy and Fire Technology Program. This meeting is held at the SANTA FE SPRINGS TRAINING CENTER located at 11400 Greenstone Ave., Santa Fe Springs, CA. For further information please call Tracy Rickman at (562) 941-4082 ext 21.

## CALIFORNIA STATE FIRE MARSHAL CERTIFICATION COURSES

Visit [www.riohondofire.com](http://www.riohondofire.com) for a complete listing of course offerings

SEC. #	DAY(S)	TIME	INSTRUCTOR	ROOM	SEC. #	DAY(S)	TIME	INSTRUCTOR	ROOM
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**FIRE TECHNOLOGY, CONTINUED**

**SEMESTER CLASSES**

**PHYSICAL FITNESS FOR THE FIREFIGHTER**

**FTECH 044**

**PHYSICAL FITNESS AND ABILITY FOR THE FIREFIGHTER**

4 Units/Prerequisite: Student must be able to lift 75 pounds and drag a 150 pound "drag dummy." Advisory: READ 023 or appropriate assessment and ENGL 035 or ESL 198 or appropriate assessment.

This course is designed to give in-service firefighters and interested students information about conditioning and fire department physical ability test designs and will include manipulative drills in order to be successful in passing California PAT's (Physical Abilities Tests). This course will provide information on the most recently developed tests in Southern California including the CPAT (Candidate Physical Abilities Test) and the Biddle (Biddle and Associate Validated Test). Students will learn about firefighter wellness programs, review basic nutrition and current NFPA (National Fire Protection Association) standards pertaining to firefighter health and safety. Students must be able to perform basic firefighter activities including climbing, using sledge hammers, dragging 150lb dummies and wearing a self contained breathing apparatus. This course may be taken once and repeated three times for credit.

1698 F 8:00AM-2:30PM STAFF SFSTC  
**SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at 11400 Greenstone Ave., Santa Fe Springs, CA**

**FTECH 101**

**FIRE PROTECTION ORGANIZATION**

3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment.

Transfers to: CSU-Restricted (see counselor for restrictions)

This course provides Fire Technology or other interested students with an overview of fire protection issues. Included will be an introduction to the philosophy and history of fire protection and fire service. The organization and function of public and private fire protection services, the laws and regulations affecting fire service and the role of fire departments as part of local government will be explored. Basic fire chemistry, fire protection systems, fire fighting strategies and possible career opportunities in fire related fields will also be addressed.

2094 Th 9:00AM-12:10 PM BENNETT J SFSTC  
 ★ 0014 M 6:00-9:10 PM BAKEY S/HEBERT D SFSTC  
 ★ 1170 W 6:00-9:10 PM BECKMAN R SFSTC  
**SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at 11400 Greenstone Ave., Santa Fe Springs**

**HYBRID COURSE ACCESS : ONLINE.RIOHONDO.EDU**

(Section #8506 is offered as a Hybrid course -50% on-campus-50% online)

☉8506 MW 6:30-7:55AM COFFMAN D Rm HS 8 (RIO MAIN CAMPUS)

**ONLINE COURSE ACCESS : ONLINE.RIOHONDO.EDU**

☉8226 24 HRS/7 DAYS COFFMAN D INTERNET

**FTECH 102**

**FUNDAMENTALS OF PERSONAL FIRE SAFETY AND EMERGENCY ACTION**

3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment.

Transfers to: CSU-Restricted (see counselor for restrictions)

This course is designed to provide the Fire Technology or other interested students with basic skills in assessing fire dangers, handling common fire situations in the home and/or industry, basic CPR and standard first aid. An emphasis will be placed on a lifestyle that promotes health, fitness, mental, and physical preparation for and in an emergency profession.

**HYBRID COURSE ACCESS : ONLINE.RIOHONDO.EDU**

(Section #8538 is offered as a Hybrid course -50% on-campus-50% online)

☉8538 MW 9:40-11:05AM COFFMAN D HS 8 (RIO MAIN CAMPUS)

**ONLINE COURSE ACCESS : ONLINE.RIOHONDO.EDU**

☉8172 24HRS/7DAYS COFFMAN D INTERNET

**FTECH 103**

**FIRE BEHAVIOR AND COMBUSTION**

3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment.

Transfers to: CSU-Restricted (see counselor for restrictions)

This course provides Fire Technology or other interested students with an exploration of theories and fundamentals of how and why fires start, spread, and how they are controlled. An in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques will be explored.

★ 1173 Th 6:00-9:05PM CONTRERAS R SFSTC  
**SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at 11400 Greenstone Ave., Santa Fe Springs**  
**HYBRID COURSE ACCESS : ONLINE.RIOHONDO.EDU**

(Section #8504 is offered as a Hybrid course -50% on-campus-50% online)

☉8504 MW 8:05-9 :30AM COFFMAN D Rm HS 8 (RIO MAIN CAMPUS)

**ONLINE COURSE ACCESS : ONLINE.RIOHONDO.EDU**

☉8211 24HRS/7DAYS WALLACE G INTERNET

**FTECH 104**

**FIRE PREVENTION TECHNOLOGY**

3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment.

Transfers to: CSU-Restricted (see counselor for restrictions)

This course is designed to provide Fire Technology or other interested students with fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

★ 0017 Th 6:00-9:10 PM MURPHY B SFSTC  
**SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at 11400 Greenstone Ave., Santa Fe Springs**  
**HYBRID COURSE ACCESS : ONLINE.RIOHONDO.EDU**

(Section #8539 is offered as a Hybrid course -50% on-campus-50% online)

☉8539 MW 11:15AM-12:40PM COFFMAN D Rm HS 8 (RIO MAIN CAMPUS)

**ONLINE COURSE CCESS : ONLINE.RIOHONDO.EDU**

☉8231 24-HRS/7DAYS COFFMAN D INTERNET

**FTECH 105**

**BUILDING CONSTRUCTION FOR FIRE PROTECTION**

3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment.

Transfers to: CSU-Restricted (see counselor for restrictions)

This course provides the Fire Technology or other interested students with an understanding of the essential components used in building construction that directly relates to fire safety. The elements of construction and design of structures, factors when inspecting buildings, preplanning fire operations, and operating at fires will be discussed. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial, and industrial occupancies.

0939 T 9:00AM-12:10 PM NOBLE W SFSTC  
**SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at 11400 Greenstone Ave., Santa Fe Springs**  
**ONLINE COURSE ACCESS : ONLINE.RIOHONDO.EDU**

☉8236 24-HRS/7DAYS WALLACE G INTERNET



SEC. #	DAY(S)	TIME	INSTRUCTOR	ROOM
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**FIRE TECHNOLOGY, CONTINUED**

SEC. #	DAY(S)	TIME	INSTRUCTOR	ROOM
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11400 Greenstone Ave., Santa Fe Springs

**FTECH 106  
FIRE PROTECTION EQUIPMENT AND SYSTEMS**  
3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment.

Transfer to: CSU-Restricted (see counselor for restrictions)  
This course provides the Fire Technology student with information pertaining to the design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

★ 1729 M 6:00- 9:10 pm WALLACE G/Brakebill J SFSTC  
SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at  
11400 Greenstone Ave., Santa Fe Springs  
ONLINE COURSE ACCESS :ONLINE.RIOHONDO.EDU  
Ⓞ8216 24HRS/7DAYS WALLACE G INTERNET

**FTECH 107  
HAZARDOUS MATERIALS I**  
3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment.

Transfers to: CSU-Restricted (see counselor for restrictions)  
This course provides fire technology or other interested students with information pertaining to the first responder role when dealing with hazardous materials operations. Hazardous materials decontamination procedures will also be discussed. Classification of hazardous materials and National Fire Protection Association standards (NFPA 472) will be addressed. This course may be taken once and repeated once for credit.

HYBRID COURSE ACCESS :ONLINE.RIOHONDO.EDU  
(Section #8540 is offered as a Hybrid course -50% on-campus-50% online)  
THE FOLLOWING SECTION MEETS AUG 28, SEPT 18, OCT 16, NOV 13 & DEC 4, 2009  
8540 F 9:00 AM-12:05 PM HULSEY J Rm S 221 (RIO MAIN CAMPUS)

**FTECH 109  
FIRE FIGHTING TACTICS AND STRATEGY**  
3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment.

Transfers to: CSU-Restricted (see counselor for restrictions)  
This course provides the fire technology or other interested students with information pertaining to the elements of the incident management system, evaluation of information management and critical incident factors including control of incident communications, basic strategy decisions, and the development of a tactical plan. Basic current fire ground strategies will also be explored in this course. This course may be taken once and repeated once for credit.

ONLINE COURSE ACCESS :ONLINE.RIOHONDO.EDU  
Ⓞ8073 24HRS/7DAYS WALLACE G INTERNET

**FTECH 111  
FIRE HYDRAULICS**  
3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment, READ 023 or appropriate assessment, MATH 030 or appropriate assessment.

Transfers to: CSU- Restricted (see counselor for restrictions)  
This course provides a review of applied mathematics and hydraulics laws as applied to the fire service. The student will study the application of formulae and mental calculation to hydraulics and water supply problems. Hose lays, engine pressure calculations, friction loss and drafting are addressed.

ONLINE COURSE ACCESS :ONLINE.RIOHONDO.EDU  
Ⓞ8075 24 HRS/7DAYS WALLACE G INTERNET

**FTECH 121  
EMERGENCY RESPONSE**  
2 Units/Advisory: READ 023 or appropriate assessment and ENGL 035 or ESL 198 or appropriate assessment.

Transfers to: CSU  
This course is intended for students that seek a better understanding of the role and responsibilities of a first responder. This class also meets the State of California Title 22 requirements pertinent to CPR, First Aid and AED (automatic external defibrillation) training as it relates to the EMT (Emergency Medical Technician). This course will also certify the student to administer oxygen, provide professional rescuer CPR and provide basic first aid. This course may be repeated once.

THE FOLLOWING SECTION MEETS AUGUST 22-DECEMBER 12, 2009  
1657 Th 9:00AM – 12:50 PM RICKMAN T SFSTC  
SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at  
11400 Greenstone Ave., Santa Fe Springs

THE FOLLOWING SECTION MEETS SEPT 12,13,19,20,26,27, OCT 3 & 4, 2009  
1642 SatSun 9:00AM – 5:00PM RICKMAN T SFSTC  
SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at

★ = Evening Ⓞ = Online/Hybrid Classes

**WILDLAND FIRE TECHNOLOGY PROGRAM**

Applications for the next Wildland Fire Academy – SEPT 1 – DEC 2, 2009

**WILDLAND FIRE ORIENTATIONS (NEED ONLY COME TO ONE DATE)**

AQII Orientations are held at the Fire Academy,

11400 Greenstone Ave. in Santa Fe Springs

SEPT 16, 2009 @ 1900

OCT 21, 2009 @ 1900

NOV 18, 2009 @ 1900

**WFT 103  
WILDLAND FIRE OPERATION (GROUND AIR)**  
3 Units/Advisory: ENGL 035 or ESL 198 or appropriate assessment and READ 023 or appropriate assessment.

Transfers to: CSU  
This course is intended for fire technology students who have an interest in wildland fire operations. Emphasis will be placed on the command structure, operational procedures and processes for ground and air operations as it pertains to the control of wildland fires. This course can be taken once and repeated once for credit.

2180 M 9:00AM-12:10PM BENNETT J SFSTC  
SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at  
11400 Greenstone Ave., Santa Fe Springs

**EMT 093  
EMERGENCY MEDICAL TECHNICIAN**  
7 Units/Prerequisite: FTECH 121. Advisory: READ 023 or appropriate assessment, BIOL 125 and ENGL 035 or ESL 198 or appropriate assessment. Students must pass a physical, drug testing, and a background check prior to clinical rotation.

This course is designed to certify students as California State Emergency Medical Technicians and gain employment as an ambulance driver or ambulance attendant. After successful completion of this course, students will be authorized to take the Los Angeles County, California State Fire Marshal and the National Registry EMT examinations. Topics discussed include pre-hospital care terminology, cardiovascular emergencies, pre-hospital childbirth, communicable disease, extrication tools and equipment, automatic external defibrillation and an understanding of the Emergency Medical System.

1102 MW 4:30PM- 9:35PM Rickman/Flack SFSTC  
+10 hours Clinical  
0008 TTh 8:30AM- 2:05PM Rickman/Flack SFSTC  
+10 hours Clinical

SFSTC-SANTA FE SPRINGS TRAINING CENTER is located at  
11400 Greenstone Ave., Santa Fe Springs

**PHYSICAL AGILITY EXAM**

This is the "Certified Physical Agility Test" required by Fire Departments in the Los Angeles and Orange County area for employment as an entry level firefighter. This Agility Exam is held on the 2nd Saturday of every month at the Santa Fe Springs Fire Department Training Center, 11400 Greenstone Avenue, Santa Fe Springs. To assure a spot, Pre-Registration, no sooner than one month prior to the desired date is REQUIRED. Call the Department of Public Service at (562) 941-4082 ex 21. Parking is not allowed in the Fire Station Lot // You must park on the street. (www.riohondofire.com)

**CWH TEST**

The CWH Test is given on the 2nd Saturday of each month at 1:00pm. Please plan on staying until 5:00pm. The cost of this test is \$50 and a check payable to Rio Hondo College must be paid on the day of the testing. No need to call to schedule, be at 11400 Greenstone Ave in Santa Fe Springs at 12:45 pm.