

Program Review

Fire and Emergency Technology

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I. Overview

A. Description of Program

The Fire and Emergency Technology Department at El Camino College was initiated in 1977 in response to a need expressed by the Fire Chiefs of the South Bay Fire Departments. It was called the Fire Science program and began with four classes in four sections for the Fall semester, 1977. The primary purpose of the program at this time was to upgrade employed fire personnel.

By 1983 Cooperative Career Education, an Associate in Arts degree and Emergency Medical Technician (EMT-1) had been added to the curriculum. The classes offered were expanded to Fire Science 1,2,3,4,5,6,7,95bcd and all became transferable to California State University at Los Angeles.¹ At about this period a change in the student population of the program was noted. The students had become primarily pre-employment students and were taking the classes to prepare for the job of professional firefighter.

At the decades end, a Certificate of Completion and a Certificate of Competence were available to students who completed the eight core classes. The name of the program became Fire and Emergency Technology and students in the EMT-1 classes were offered certification as a Los Angeles County Emergency Medical Technician upon successfully passing the L.A. County examination.

In 1989, El Camino College took the South Bay Fire Academy in Inglewood under its auspices. The college rented the Academy site from the City of Inglewood and the instructors became employees of the college. The name was changed to The Los Angeles Regional Fire Academy at El Camino College and Community College credit was issued to graduates.² The academy students were generally a mix of already hired new firefighters and El Camino College Fire Technology students. By 1992, the Academy classes were almost exclusively pre-employment students. The local Fire Departments realized the advantages of hiring personnel who had already proved themselves by passing the rigorous training and many began to restrict their recruiting to Community College Academy graduates.

In response to requests from the El Camino College Fire and Emergency Technology Advisory Committee, ten California State Fire Officer Training courses were added in 1993. Completion of these courses, together with a rather large fee, allows a student to become a certified "State of California Fire Officer".

As a result of the Inglewood Fire Department merging with Los Angeles County Fire Department in 2001, the Academy grounds became surplus property and the College was in danger of losing our Academy location. El Camino College, through the "Partnership for Excellence" grant funding, purchased the Academy grounds, buildings and equipment.

In 2004, after the cancellation of a previously approved State grant, the college purchased an internationally recognized "Flash Chamber" for the Academy.³ In addition to the four Academies each year, over 500 local professional firefighters have received this specialized training. The El Camino Fire Academy is also used regularly by Police Departments for high angle training and the United States Coast Guard for Homeland Security classes.

¹ Many of these numbers and the class titles have since been changed to align with California State Fire Marshal requirements for uniformity and articulation.

² Los Angeles Regional Fire Academy is El Camino College, Long Beach City College, Rio Hondo College and Cal State Los Angeles.

³ The chamber is also known as the "Swede System" of Flashover training.

Current Program

The Fire and Emergency Technology program has several fire service educational goals that students can select depending upon their own choices and abilities:

- 1. Certificate of Completion**
Issued upon completion of the eight core classes.⁴
- 2. Associate of Science**
Issued upon completion of the eight core and the general education classes
- 3. Basic Fire Academy**
California State Fire Marshal certificate issued upon completion of the 400 hour course.
- 4. Fire Paramedic Training**
This courses are conducted at Los Angeles County Paramedic Training Institute. The class is available to students after they complete the Fire Academy. Professional Fire Departments may sponsor students without prerequisites.
- 5. Matriculation to a Bachelor of Arts Program**
Only Cal State Los Angeles offers a Bachelor degree in Fire Tech however, both Long Beach and Dominguez Hills offer Public Admin majors that articulate with our program.
- 6. Continuing Education for Professional Firefighters.**
These classes are California State Fire Marshal Officer classes and are offered only upon request from the Department Advisory Committee.
- 7. 'In-Service Training' for Professional Firefighters.**
This training is presented by board approved on-duty firefighters through a FTES sharing program.

B. Status of Previous Recommendations

- 1. Need to offer greater variety of classes**
The Program has expanded to a total of 35 Catalog offerings.
- 2. Need to offer classes more often**
Each of the eight "Core classes" is now offered at least once in a school year. All of the traditional classes are offered over a two-year period.
- 3. Need to offer more evening classes**
The Fire Technology classroom now has a class each evening of the week excepting Friday.
- 4. Need to offer more Fire Academies**
Our Academy calendar is now full with two full-time and two part-time Academies offered per academic year.
- 5. Need to offer more EMT classes**
Four sections of EMT lecture and five sections of lab are now offered. In addition a dedicated classroom is planned for Fall 2007.
- 6. Need to experiment with dividing 3 hour classes into 2 or more segments**
Fire Tech 1 is now offered in four sections, two meet twice a week in shorter periods.

⁴ Ftec 1, Ftec 2, Ftec4, Ftec 5, Ftec 6, Ftec 10, Ftec 20, Ftec 140 &141. If a "B" grade point average is maintained a "Certificate of Competence" is issued.

7. Need to analyze career options in the FET field and consider developing courses that meet those career preparation needs

Fire Control IV (Oil Refinery Fire Protection) was added to the Academy curriculum. The second action added Coast Guard Fire Fighting classes for prospective merchant seaman.

8. Need to develop more parking spaces

The College prepared and secured a “Bond” measure that will add a parking structure to the Industry and Technology area of the Campus.⁵

9. Need to analyze updated textbook options

We have added the Delmar Publishers catalog to our instructor’s choices of Textbooks. Delmar texts are updated about twice as often as the IFSTA. In addition, the Delmar offerings are more like College textbooks, rather than the industrial appearing IFSTA Manuals.

II. Program Statistics

A. Demand: FTES by Course/Program

Instructions: Analyze the **FTES by Course/Program** using 1st census data and answer the following questions. At a minimum, your analysis must include a 3-year cycle comparing like semesters.

Course	Year 1 (Term and year)	Year 2 (Term and year)	Year 3 (Term and year)
FTEC 1	15.29	15.83	15.40
FTEC 4,5,8,9,10,20	27.25	26.28	25.84
FTEC 15 (Fire Academy)	36.70	40.61	38.27
FTEC 140 & 141 (EMT)	22.92	28.12	31.00
FTEC 128,130-139 (Paramedic)	52.39	54.59	53.47
FTEC 150 (FF In-service)	68.26	68.87	80.37

1. Given the data, can you recognize any trends in course demand in any of the Program’s courses? Enrollment is very stable and consistently exceeds 100% capacity. The greatest demand has been in the EMT series, FTEC 140 and 141.
2. What are you doing to respond to trends? Two additional sections of FTEC 140 and 141 were added. Additional faculty and facilities modifications are needed to add more sections. A full-time faculty position was approved, but not filled due to an inadequate applicant pool in 2004-2005.
3. Should a recommendation be written addressing the data? Yes No
(If yes, list.)

B. Offerings: Fill Rate*

Instructions: Review and analyze the **fill rate data** (including the fill rate per course for both day and evening), provided by Institutional Research for this program for a three year cycle and answer the following questions:

⁵ Because of the lead time required for design and bidding, the parking structure will probably not be completed until 2008.

Average fill rate of courses in program: How does this program compare to:

	Year 1 (Term and year)	Year 2 (Term and year)	Year 3 (Term and year)
On-campus courses	113%	111%	103%
Fire Academy	94%	104%	98%
Paramedic Training	98%	94%	100%

- Given the data, is the program in a growth mode? Yes No
Comment. The fill-rate for day and evening courses remained the same for all program years. The on-campus core courses were compared with the different components of the program for comparison purposes. Initial enrollment for the paramedic program is nearly always 100% due to the waiting list of students.
- What adjustments are indicated? None at this time.
- Should a recommendation be written that addresses the data? Yes No

* Percent of fill of each classes at census.

C. Scheduling: Student Satisfaction with Scheduling

Instructions: Complete the chart below. Indicate the time when sections of courses in the program are currently scheduled to start. Analyze the data provided by Institutional Research on student satisfaction with scheduling in the program and answer the questions.

Course	During the early morning before 10 am	During the late am/early pm 10am –1:55 pm	During the late afternoon 2 pm -4:25 pm	During the evening 4:30 & later	During the weekend	During the summer	Via Telecourse	Via Online
FTEC 1	X					X		
FTEC 1	X							
FTEC 1			X					
FTEC 1				X				
FTEC 4		X						
FTEC 5	X							
FTEC 8				X				
FTEC 9				X				
FTEC10	X							
FTEC 15	X							
FTEC 15				X				
FTEC 19		X						
FTEC 20				X				
FTEC 140	X					X		
FTEC 140	X							
FTEC 140	X							
FTEC 140				X				
FTEC 141		X				X		
FTEC 141		X						
FTEC 141		X						
FTEC 141			X					
FTEC 141				X				

1. What (if anything) is indicated by the student satisfaction with scheduling?
The pattern of courses is mixed, with the greatest demand and number of course offerings in the morning and evening. Enrollment has been strong across all time periods.
2. Are there time periods of high student demand which are not being addressed? ___ Yes X No
How could such demand be addressed?
3. Should a recommendation be written addressing this area? X Yes ___ No
The faculty are considering distance learning and online courses, especially those of interest to currently employed fire service personnel.

D. Retention and Success

1. Retention

Instructions: Review and analyze the data on **retention (course completion with a grade other than W)** over a three-year cycle comparing day to evening classes, term to term (e.g. fall to spring, spring to summer, etc.), and course levels.

1. Given the data, what trends are observed?

Comment

- a. The first noted trend over the three-year period was that retention for the program was excellent compared to the college. The program exceeded the college rate by over 10% in each program year, with an average of 90.2%.
- b. The lowest retention in fall 2004 and spring 2005 was the EMT courses, FTEC 140 and 141 at 57.8% and 62.5%. A change in faculty and a change in delivery methods to meet the new National Registry requirements beginning in fall 2005 resulted in significant improvement to 81.3% and 81.6% retention.
- c. The other course with lower than average retention for the program over the three year period was for the entry level course, FTEC 1, at 81.2%. This is an exploratory course in which students often consider career opportunities in the field.
- d. The highest retention average was for the Fire Academy course, FTEC 15, with an average retention over the three-year period of 98.1%.
- e. The retention for each course was very comparable from year to year, and from fall to spring, with a variance not exceeding 2% (except FTEC 140 and 141 as noted above).
- f. The retention for evening courses conducted on campus was within 2% of day courses conducted on campus.

2. Should a recommendation be written addressing the data? ___ Yes X No

2. Success Rate

Instructions: Review and analyze the data on **success rate (students who earned a grade of A,B,C, or Credit)** over a three-year cycle comparing day to evening classes, term to term (e.g. fall to spring, spring to summer, etc.), and course levels and answer the following questions:

1. What trends are observed?
 - a. Success rates for the program was also excellent compared to the college. The program exceeded the college rate by 8-10% in each program year.
 - b. The lowest success rate in fall 2004 and spring 2005 was the EMT courses, FTEC 140 and 141 at 52.7% and 76.4%. A change in faculty and a change to meet the new National Registry requirements beginning in fall 2005 resulted in significant improvement to 85.0% and 82.9%.
 - c. The courses with the lowest success rate in general were FTEC 1, which is the first course students take and FTEC 8 (Fire Service Hydraulics) which is very computational in nature.
 - d. The success of each course was very comparable from year to year, and from fall to spring (except FTEC 140 and 141 as noted above).
 - e. The success of evening courses compared to day courses on campus were very comparable.
2. Should a recommendation be written addressing the data? _____ Yes X No

III. Curriculum

A. Course and Content

1. Courses Not Offered

Instructions: Indicate the total number of courses in the program and list all courses in the program which are in the catalog but have not been offered in the last three years. Refer to this list to answer the following questions:

The Fire and Emergency Technology program has 71 courses listed in the college catalog. A total of 30 courses have not been offered in the past three years. Eight of the courses were created as part of the in-service program with the Lifeguard Division of the Los Angeles County Fire Department. Due to budget limitations, these course offerings were discontinued, but may resume at some point in the future. The courses in this series include the following:

FTEC 143, 160abcd, 161, 162, 164, 165 and 166abcd.

The remaining 23 courses are officer level courses designed for currently employed personnel. The courses were offered on a regular basis in the past, but enrollment was not adequate to continue. The courses in this series include the following:

FTEC 40A, 40B, 41A, 41B, 70, 80A, 80B, 81A, 81B, 81C, 90A, 90B, 100, 101A, 110A, 110B, 111A, 111B, 111C, 112A, 112B, 113A, and 113B.

1. Given the data, are there courses that should be inactivated? _____ Yes X No
Comment.

2. If there are courses not offered in the last three years that you do not wish to inactivate, what reasons are there to keep them active?

The lifeguard program may resume at some point in the future. The South Bay Fire Training committee has requested that the officer level courses remain active for possible future needs.

3. Should a recommendation be written addressing the data? Yes No
(If yes, list)

2. Course Revisions and Additions

Instructions: Utilize the Course Review Chart from the Curriculum Office to answer the following:

1. Are there course outlines that should be revised? Yes No
While all the courses in the program have been revised to meet Title 5 requirements, 19 courses have not been revised in the last 10 years. Nine of the courses are part of the officer level series and should only be revised when changes are mandated by the California State Fire Marshal's office (CSFM), since the courses are offered for CSFM certification purposes. Ten of the courses are part of the core requirements for the program and should be reviewed in the near future. This list of courses include the following:
- FTEC 1, 2, 4, 5, 6, 9, 10, 11, 14 and 20.
2. Are there courses inconsistent with current practice in the field? Yes No
3. Should new courses to be added to the program? Yes No
The South Bay Fire Training Committee and the South Bay Fire Chiefs Association have begun discussions to consider offering courses related to the fire service and homeland security. A course is currently in development covering Weapons of Mass Destruction and Disaster Preparedness.
4. Are adjustments necessary to the conditions of enrollment (Prerequisite, Corequisite, Recommended Preparation, and Enrollment Limitations) for a specific course to increase student success? Yes No Uncertain
5. If the program offers a degree and/or certificate, list them and indicate when the requirements were last reviewed? (If not applicable, skip to Question 7)

Associate of Science = Fire Technology – Fall 2004

Certificate = Fire & Emergency technology - Fall 2004

Certificate = Fire Academy - Spring 2007

Certificate = Emergency Medical Technology = Paramedic – Fall 2004

6. Are these degree and/or certificate requirements inconsistent with current practice? ___ Yes X No
Explain
 The State Fire Training office has requested all Fire Technology programs add Fire Hydraulics to the Associate degree requirements.
7. Is there a need to create or delete a degree and/or certificate? _____ Yes X No
Explain
8. Should any recommendations be written that address the above responses? ___ Yes X No

B. Articulation

Instructions: Articulation is the process by which courses taken at ECC can be used to satisfy subject matter requirements at another college or university. This is important in the transfer process for students. To help you in this area, you can review articulation agreements at www.assist.org, the California Articulation Number Guide or meet with the Articulation Officer, Lori Suekawa (ext. 3517).

1. Are there any courses in your curriculum which are part of a lower division preparation for the major that are not articulated with our major transfer institutions?
 No
2. What problems, if any, are there in articulating courses?
 None.
3. Should a recommendation be written addressing above responses? _____ Yes X No
 (If yes, list.)

C. Instruction and Assessment

1. Learning Methods

1. What learning methods are incorporated inside and outside the classroom in the program to promote student success? **Explain**
- Didactic instruction is held in the classroom using a combination of lecture, audio-visual, practical demonstration and field trips. Manipulative instruction, like that conducted at the Fire Academy, involves the use of specialized tools, apparatus and buildings and is done at the Inglewood Fire Training Center.
2. Should a recommendation be written addressing above response? _____ Yes X No
 (If yes, list)

2. Assessment

1. How do you evaluate the extent to which the learning objectives, skills, and competencies are being met?

Traditional “On Campus” classes generally use a series of quizzes and exams for assessment. Those campus classes that offer a State Fire Marshal certificate use the State exam in addition to the regular collegiate Final Exam. Both the Fire Academy and the Emergency Medical classes use State of California and Nationally recognized written tests. Both also require a manipulative test of physical skills.

2. How do you use the results of the above evaluation to improve student learning and the quality of the program?

Los Angeles County mails results of the National EMT test to the College which includes a comparison result to other colleges.

3. Should a recommendation be written addressing this area? Yes No
(If yes, list)

IV. Program Requirements A. Instructional Support

1. Identify key instructional support areas used by the program.

Libraries & Programs:

X	Library		Special Resource Center	X	Basic Skills Study Center		Library Orientation
	Music Library		Puente Program		Honors Transfer Program		Other (Please list.)
	Learning Resource Center Media Materials Collection	X	Assessment/Testing Office	X	Counseling		
X	EOP&S/CalWORKS	X	Transfer Center	X	First Year Experience		
	Learning Communities		Project Success		Honors Transfer Program		

Computer Labs & Tutoring:

	LMTC Computer Commons		SRC High Technology Center		Other Computer Lab: Please list.		Writing Center
	CAI MAC Lab		Writing Lab				LRC Tutorial Program
	CAI Windows Lab		Math & Science Lab				Math Tutoring
X	TOP Lab		Keyboarding Center				SRC Tutorial Program
X	Hawthorne BTC						EOP&S Tutoring
	Inglewood Center						

Faculty Support Services:

	Graphic Arts	X	Copy Center		Distance Education		Other (Please list.)
X	Media Services AV Production	X	Tech Services Help Desk		Teleconferences		
X	Media Services AV Equipment Distribution	X	Support Staff		Webconferences		
X	ECC Vehicles	X	ECC hosted Websites	X	Staff Development		
X	ECC E-mail						

2. Do you have some instructional support needs that are not being met? X Yes ___ No

Comment.

The student questionnaire results showed students made excellent use of both the counseling services and the library but very little use of the other College instructional assistance programs. Regular reminders in class, by the instructors, of the services offered would certainly increase their use.

3. Should a recommendation be written to address your needs? ___ Yes X No
(If yes, list)

B. Facilities and Equipment

1. Does the program make effective use of its facilities and equipment? **Explain** Yes

Campus classes nearly fill daytime hours and all evenings except Friday. The Academy is occupied seven days a week during the semester and three during the summer.

2. Are adequate facilities, equipment and supplies available for the program? ___ Yes X No
Explain

The regular fire program classroom is sufficient for the classes offered. The room is amphitheater in design and popular with students and instructors. The Emergency Medical Technology classes have recently been assigned a dedicated classroom with excellent lockable storage. Results from the Faculty questionnaire indicate both classrooms need a ceiling mounted DVD projector because of the paradigm change from the video tape format. The construction at the main campus necessitated the demolishing of the “Emergency Preparedness Center” where the campus Fire Engine was housed. The campus Fire Engine is part of the campus emergency equipment and should return with an inside location. The Engine now sits in the open at the Academy. The faculty questionnaires also indicated needs for substantial needs and repairs at the Fire Academy location.

1. Expansion of the “Womens Restroom” and “Womens changing room” which are minimal.
2. Replacement of the “Fireproof Lining” of the Fire Environment building is necessary to meet safety standards. (This is currently underway and needs no further addressing)
3. Construction of a “Canopy” to protect our expensive and difficult to replace Fire Apparatus.
4. A clarification of the status and disposal of surplus and out-of-date Fire Apparatus to make room on the Academy Drill ground.

3. Are the facilities and equipment adequately maintained? Yes No

Explain

The majority of the maintenance at the Academy is done by the recruits and mentors.

4. Should a recommendation be written addressing the data? Yes No
(If yes, list)

Our suggestions should be forwarded to the committee for new construction.

C. Staffing

Instructions: Analyze the data on **FTEF, adjunct FTEF, and the FT/PT ratio** for the most recent fall semester and answer the following questions:

FTEF (full-time equivalent faculty): # 5.8

Number of full-time FTEF: # 2.92

Number of adjunct FTEF: # 2.88

FT/PT load ratio: 50.3/49.7

1. How do the program numbers compare to a like semester (Fall to Fall) three years ago or the previous program review?

The program numbers have compared very closely, with a steady trend toward increasing FTEF and a growing ration of part-time to full-time faculty.

2. What do the program data indicate? Comment on any trends or unusual data.

The data reflect strong enrollment and steady growth.

3. How does the FT/PT ratio benefit or harm the program?

The program would benefit greatly by an additional faculty member with a specialty in EMT. Two previous advertisements have yielded insufficient pools of candidates.

4. Do you have a faculty mentoring program? Yes No
Describe

5. How do faculty maintain currency in their field?

Active involvement in professional organizations, participation in training and workshops, professional periodicals.

6. Fill in the faculty status data below and answer the questions that follow.

Name	Reassigned time (how much in %)	Currently on leave (check)	Retired in last 2 years (check)	FT hired last 3 years (check)	Anticipated to retire in next 3 years (check)
Steven Nothern	15%				X
Kevin Huben	30%				
Ken Mays	25%				
Plus 11 part time faculty	0%				

6a. How does this data impact the program?

The program has a significant pool of reliable part-time faculty, most of whom are still employed in the field.

6b. Will this data affect the program in the future? No.

7. From this information, can you identify present and future staffing needs? X Yes _____ No
Explain

The program currently offers 9 sections of EMT courses, all of which fill very early in the registration process. More courses could be added to meet the demand, however, a full-time instructor would be needed.

8. What is the department doing to address any future staffing needs?

The faculty and dean request a full-time position every year.

9. Should a recommendation be written addressing the data? X Yes _____ No
(If yes, list)

Continue to request and recruit a full-time faculty member with a special emphasis on EMT.

D. Planning

1. Do the program faculty and other personnel have a clear idea of what is happening in the program, where it is headed, what external changes are affecting it, and what changes need to be made in order to enable the program to adapt and continue to be successful? **Explain**

The area of “Weapons of Mass Destruction” will almost certainly be added to the State requirements.

2. What data, not currently provided, would be needed in order to improve planning for the development of the program? **Explain**

The U.S. Department of Homeland Securities will soon send guidelines for WMD instruction.

3. What major external changes or trends do you expect to be of particular relevance to your discipline in the next five years?

Instruction in Heavy Rescue, Swift Water Rescue, EMD, and Building Collapse will be stressed by both the Department of Homeland Security and the State Office of Fire Training.

4. What will the implications of these changes or trends be for the program and how will the program need to respond?

A decision will have to be made between developing whole new classes or adding new material to existing classes.

5. Based upon the information above, how would you like the program to evolve within the next five years?

We should have an increase in the number of semester classes at the campus and add an additional week at the Academy to cover the new material from the Department of Homeland Security.

6. Should a recommendation be written addressing the data? X Yes No
(if yes, list)

The Department should wait for direction from the California State Office of Fire Training.

V. Conclusion

A. Prioritize Recommendations

1. Replace the retiring full time instructor in the FTEC program. (This has been approved and the job has been announced.)
2. Improvements in Female restroom and changing facilities at the Fire Academy
3. Update the technology for the dedicated Fire Technology and Emergency classrooms to include a DVD projector.
4. Provide a cover for the Fire Apparatus at the Academy.
5. Provide space for the campus Fire Engine inside the new Emergency Preparedness building at the campus.
6. Change the required eight “Core Classes” to include the Fire Hydraulics class.

B. Identify major needs

A major need concerns facilities for women at the Fire Academy. Currently women recruits are required to use the projection room to change clothes. We have a requirement of 60 seconds to change into fire combat clothing and return to formation. The women must travel an extra 20 yards and climb stairs and are often unable to meet the time standard.

The Academy woman’s rest room is tiny and accommodates a single person. Women of large size must use the men’s restroom. During our graduations (Four times a year) the line to the women’s restroom becomes so long we close the men’s restroom to males, quickly clean the restroom and open it to females for 30 minutes.

We need permanently mounted DVD projectors in the classroom. We have an extensive video-tape, slide and transparency collection and we would like to update our technology to DVD and Power Point.

We depend upon the generosity of local Fire Departments who have provided our Fire Apparatus by donation. All of the Engines in current use sit outside in the weather. This severely decreases both apparatus and fire hose life-spans.

C. Discuss strategies to implement recommendations and needs

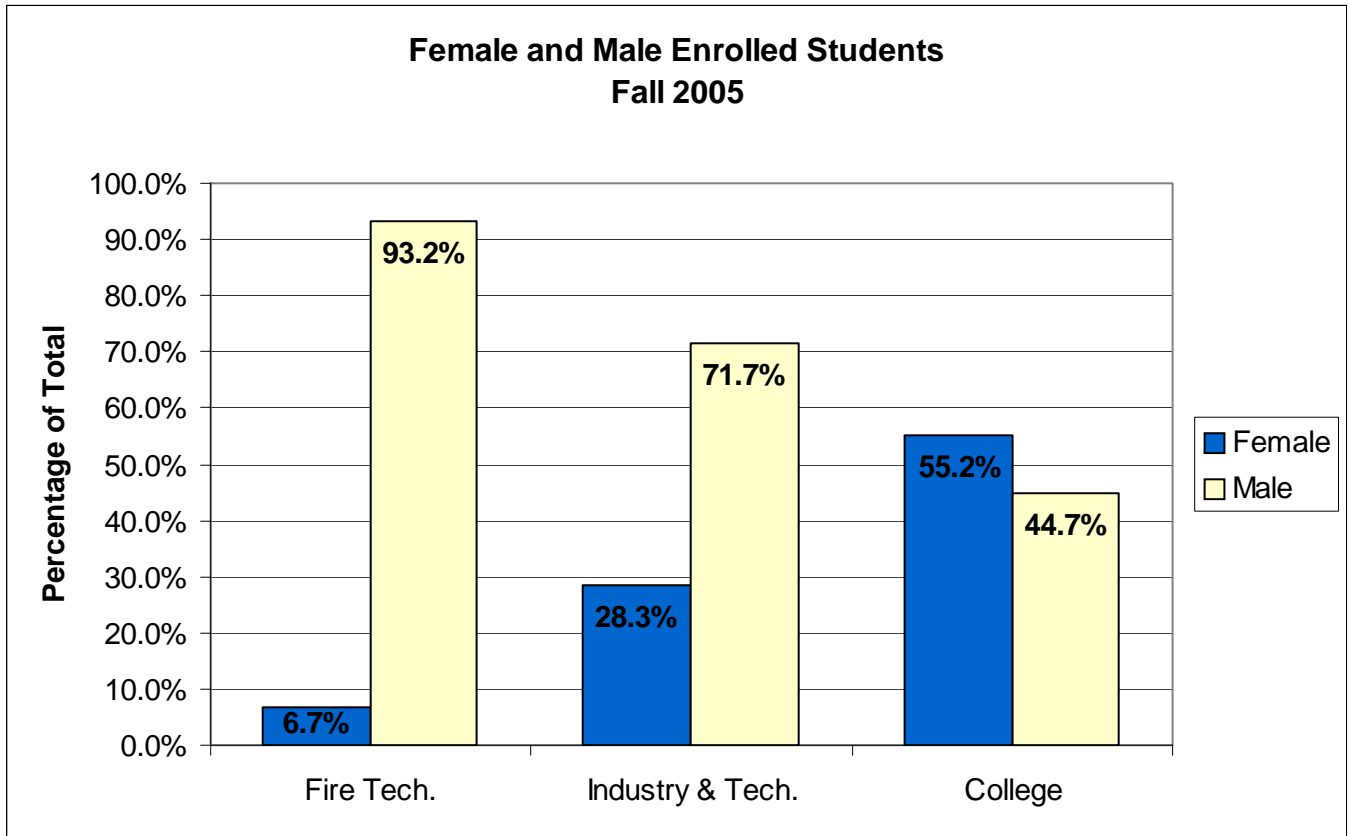
1. Replace the retiring Full-time instructor. (testing currently underway)
2. Upgrade the female facilities at Fire Academy
 - a. During graduation ceremonies, temporary women and handicap portable toilets should be rented for the academy grounds.
 - b. Forward our recommendation to the committee on campus
3. Technology, forward recommendation to committee for “updating” the I.T. Building
4. Apparatus Cover, forward our recommendation to the committee on campus
5. The Fire and Emergency Department coordinator should work with the Emergency Preparedness coordinator to insure that the new “Emergency Preparedness Center” will accommodate our campus fire engine and its equipment.
6. The F.E.T. coordinator should submit a change to the curriculum committee adding Fire Hydraulics (Ftec 8) to the core classes.

APPENDIX A

Characteristic	Category	Fall 2003		Fall 2004		Fall 2005		ECC		ECC District	
		n	%	n	%	n	%	n	%	n	%
All Enrolled	Total	963	100.0%	819	100.0%	981	100.0%	24,494	100.0%	520,376	100.0%
Gender	Female	67	7.0%	45	5.5%	66	6.7%	13,499	55.1%	264,871	50.9%
	Male	893	92.7%	774	94.5%	914	93.2%	10,970	44.8%	255,505	49.1%
	Unknown	3	0.3%	0	0.0%	1	0.1%	25	0.1%	0	0.0%
Ethnicity	African-American	82	7.2%	69	8.4%	84	8.6%	4,550	18.6%	88,701	17.0%
	Amer. Ind. or Alask	7	0.3%	3	0.4%	5	0.5%	119	0.5%	1,219	0.2%
	Asian	36	3.2%	31	3.8%	42	4.3%	3,329	13.6%	58,779	11.3%
	Filipino	21	1.6%	15	1.8%	19	1.9%	954	3.9%		
	Latino	200	16.6%	160	19.5%	217	22.1%	7,462	30.5%	157,138	30.2%
	Other	20	2.1%	20	2.4%	23	2.3%	465	1.9%	14,908	2.9%
	Pacific Islander	6	0.5%	5	0.6%	7	0.7%	213	0.9%	2,061	0.4%
	White	480	44.1%	425	51.9%	486	49.5%	5,296	21.6%	197,570	38.0%
	Unknown or Decline	111	9.4%	91	11.1%	98	10.0%	2,106	8.6%	0	0.0%
Age/Age Group	Under 17	4	0.4%	1	0.1%	6	0.6%	522	2.1%	139,140	26.7%
	17	12	1.2%	16	2.0%	4	0.4%	676	2.8%		
	18	49	5.1%	57	7.0%	48	4.9%	2,874	11.7%	11,840	2.3%
	19	55	5.7%	57	7.0%	82	8.4%	3,018	12.3%		
	20	69	7.2%	56	6.8%	63	6.4%	2,610	10.7%	5,996	1.2%
	21	52	5.4%	53	6.5%	61	6.2%	1,799	7.3%	5,720	1.1%
	22	52	5.4%	39	4.8%	37	3.8%	1,450	5.9%		
	23	46	4.8%	24	2.9%	41	4.2%	1,218	5.0%	20,233	3.9%
	24	42	4.4%	35	4.3%	37	3.8%	926	3.8%		
	25-29	134	13.9%	92	11.2%	134	13.7%	2,935	12.0%	43,779	8.4%
	30-39	205	21.3%	166	20.3%	224	22.8%	3,067	12.5%	97,447	18.7%
	40-49	176	18.3%	158	19.3%	171	17.4%	1,888	7.7%	80,126	15.4%
	50-64	66	6.9%	65	7.9%	73	7.4%	1,109	4.5%	69,852	13.4%
	65+	1	0.1%	0	0.0%	1	0.1%	391	1.6%	46,878	9.0%
Class Load	Full-time	202	21.0%	150	18.3%	165	16.8%	6,784	27.7%		
	Part-time	675	70.1%	662	80.8%	668	68.1%	16,716	68.2%		
	Not enrolled or N/A	86	8.9%	7	0.9%	148	15.1%	994	4.1%		
Time of Classes*	Daytime	347	36.0%	313	38.2%	337	34.4%	16,667	68.0%		
	Evening	105	10.9%	84	10.3%	101	10.3%	6,117	25.0%		
	Unknown	425	44.1%	415	50.7%	395	40.3%	1,710	7.0%		
Enrollment Status	First-Time Student	229	23.8%	146	17.8%	53	5.4%	3,076	12.6%		
	First-Time Transfer	44	4.6%	32	3.9%	163	16.6%	1,631	6.7%		
	Continuing Student	657	68.2%	601	73.4%	595	60.7%	14,397	58.8%		
	Returning Student	14	1.5%	40	4.9%	168	17.1%	4,483	18.3%		
	K-12 Special Admit	19	2.0%	0	0.0%	2	0.2%	715	2.9%		
Academic Level	College degree	248	25.8%	254	31.0%	318	32.4%	2,852	11.6%		
	HS Graduate	197	20.5%	529	64.6%	620	63.2%	19,053	77.8%		
	Not a HS Grad	18	1.9%	26	3.2%	4	0.4%	528	2.2%		
	K-12 Special Admit	19	2.0%	0	0.0%	2	0.2%	715	2.9%		
	Unknown	481	49.9%	10	1.2%	37	3.8%	1,346	5.5%		
Educational Goal	Intend to Transfer	229	23.8%	187	22.8%	209	21.3%	9,194	37.5%		
	Degree/Certif. Only	96	10.0%	114	13.9%	96	9.8%	1,221	5.0%		
	Retrain/recertif.	283	29.4%	259	31.6%	315	32.1%	2,353	9.6%		
	Basic Skills/GED	1	0.1%	3	0.4%	8	0.8%	822	3.4%		
	Enrichment	28	2.9%	37	4.5%	57	5.8%	1,246	5.1%		
	Undecided	294	30.5%	219	26.7%	264	26.9%	7,365	30.1%		
	Unknown	32	3.3%	0	0.0%	32	3.3%	2,293	9.4%		
Additional characteristics available by request.											

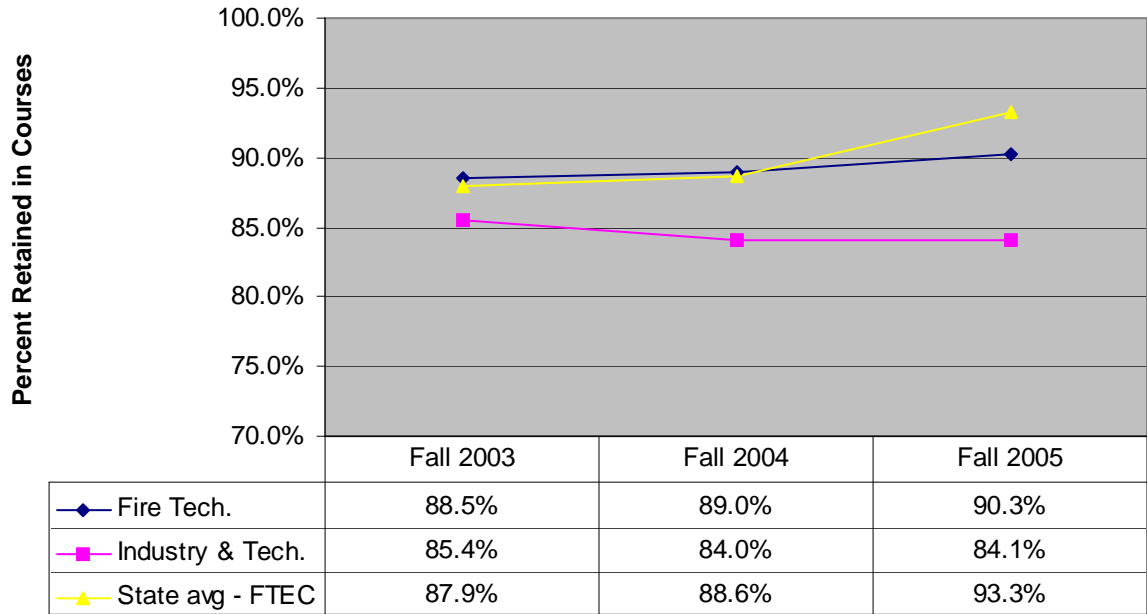
APPENDIX B

	Female	Male		Female	Male
Fire Tech.	6.7%	93.2%			
Industry & Tech.	28.3%	71.7%	1033	2618	3651
College	55.2%	44.7%			



APPENDIX C

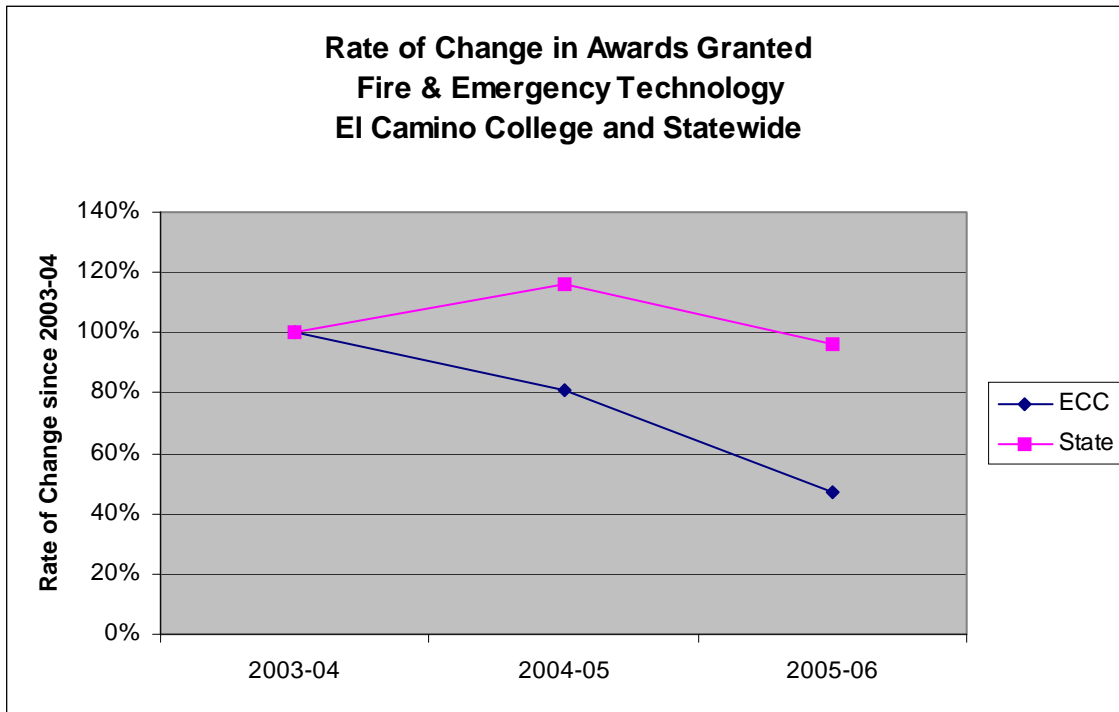
**FTEC Retention Rates
Fall 2003 to Fall 2005**



APPENDIX D

Location	Type	2003-04		2004-05*		2005-06*	
		n	Base %	n	% of base	n	% of base
ECC	AA/AS	30	100.0%	20	66.7%	24	80.0%
ECC	Certificate	6	100.0%	9	150.0%	5	83.3%
ECC	Academy	n/a		33		n/a	
ECC Total		36	100.0%	62	172.2%	29	46.8%
State	AA/AS	715	100.0%	837	117.1%	901	126.0%
State	Certificate	890	100.0%	1753	197.0%	1610	180.9%
State	Academy	1020	100.0%	453	44.4%	409	40.1%
Statewide total		2625	100.0%	3043	115.9%	2920	96.0%

** Percentages of previous year used to show change over time.



APPENDIX E

	2003-04	2004-05	2005-06	3-year Avg
Annual Seat Count	2916	2693	2865	2825

