OAKLAND COMMUNITY COLLEGE

COLLEGE CURRICULUM REVIEW COMMITTEE

WELCOME TO THE CURRICULUM REVIEW SELF-STUDY PROCESS

Discipline/Program FFT Coordinator(s) Matt Sabol

CRC Mentor Boozer/Mays Review Date: April 21, 2006

Thank you for agreeing to coordinate the Curriculum Review in your area. As Discipline/Program Review Coordinator, it is your responsibility to make sure the steps detailed below are completed by the Review Date. Your packet includes instructions and forms for completing the Review. If needed, a CRC mentor is available to you. Your Dean will also be able to provide meaningful assistance in completing this important task.

In the Part I-Core Review, the College asks your discipline/program to analyze its curriculum from a variety of perspectives. These include course offerings and contents, enrollment/retention, transfer trends, and plans for the future. An additional section of activities is contained in Part II. The nature of these review activities will depend on whether you are a member of a Discipline or a Program.

Included in this document to help you work on your review are: 1) Data Collection forms to distribute to your Discipline/Program colleagues and 2) Data Analysis forms with summary sections to help you complete your review. After filling out these forms, you will finalize your review by re-printing all of the summary sections on one Summary Report Form for submission.

Once again, thank you for agreeing to work on this very important process with your colleagues. Together we will constantly strive to ensure the excellence of instruction at OCC.

College Curriculum Review Membership
2005-2006

Lin Armitage (HL)	Diane Hill (OR)	Janet Peart (AH)
Thomas Boozer (AH)	Tony Ingram (OR)	Letyna Roberts (ex-officio)
Nadia Boulos (HL)	Shelley Larson (RO/SF)	Karen Robinson (HL)
Charlott Couch (RO/SF)	David Mathews (RO/SF)	Beverly Stanbrough (RO/SF)
Jennifer Craft (AH)	Gail Mays (AH)-Chair	Bob Zemke (OR)

CURRICULUM REVIEW SELF-STUDY PROCESS FOR DISCIPLINE/PROGRAM COORDINATORS

Coordinator: The bold type below indicates forms that appear on the CRC disk.

Step 1—Request that the Office of Assessment and Effectiveness (contact information available on InfoMart) send you the Dashboard data for your Discipline/Program.

Step 2—Send the **Data Collection forms** to all the full-time faculty and/or adjunct members of your Discipline/Program, as specified on each form.

Step 3—Collect syllabi from all adjuncts and full-time faculty for every course they are teaching, and complete the **Data Collection forms** for each course.

Step 4—After collecting the above data, complete the **Data Analysis forms** to help you organize and analyze the information you've gathered.

Step 5—Create a "Summary Report" by compiling all the summary paragraphs from the Data Analysis forms.

Step 6—Forward a DRAFT copy of your compiled Discipline/Program Summary Report along with a **Faculty Sign-off form** to all faculty participating in the review at least four weeks prior to your review appointment. NOTE: As part of the official CRC Review Document, please include the returned Faculty Sign-Off Forms.

Step 7—Send an electronic copy of your Summary Report to the Chairperson of the Curriculum Review Committee at least two weeks prior to your review and provide two hard copies of the full report, including the **Data Collection and Data Analysis forms,** to your mentor.

CRC
PART I-CORE REVIEW

Coordinator: Data Collection and Data Analysis forms for the following review areas are attached.

A. CATALOG COURSE DESCRIPTIONS

- Please reproduce copies of all your Discipline/Program course catalog descriptions, and distribute them to the full-time members of the Discipline/Program with the Data Collection form asking the faculty to comment on whether the catalog course descriptions are accurate, clear, and current.

- Analyze the responses in order to determine where there is a need for revision.

B. SYLLABI

- Collect all syllabi from all full-time and adjunct faculty for all sections of all courses listed in the catalog under your Discipline/Program.

- Analyze where there are inconsistencies or omissions in the syllabi.

C. ENROLLMENT TRENDS AND STUDENT RETENTION

- Collect the Dashboard enrollment and retention data for the current and last academic year (available from the Office of Assessment and Effectiveness).

- Analyze areas of strength and weakness. Discuss, where applicable, student recruitment and student retention strategies that your Discipline/Program participates in currently or intends to implement in the future.

D. DISCLIPLINE/PROGRAM NEEDS AND RESOURCES

- Collect information on the Discipline/Program's current and anticipated needs and resources by distributing the Data Collection form to all full and adjunct faculty.

- Discuss what resources and staff development activities your Discipline/Program needs and also indicate necessary curriculum changes/revisions where appropriate.

FIRE FIGHTER TECHNOLOGY

Associate in Applied Science (FFT.AAS)

This program leads to an Associate in Applied Science Degree gives the student an educational background for employment in the fire science area and aids persons already employed to obtain credentials for promotional opportunities. Students who satisfactorily complete the program will exhibit competency in building construction and fire safety, hydraulics, fire protection systems and equipment, handling of hazardous materials, arson investigation, fire safety and administration.

Students with a valid current EMT license (which includes the necessary First Aid and Emergency Services/First Responder training), issued by the State of Michigan, will be granted PER 2540 Medical First Responder/First Responder equivalency following the existing vocational model.

Students who have completed their State of Michigan Firefighter I and II Certification will be granted credit for FFT 1510 Introduction to Fire Prevention and FFT 1520 Fundamentals of Fire Prevention. Preservice students must complete FFT 1510 and FFT 1520 prior to enrolling for higher course requirements.

Major Requirements — Credits

FFT	1510*	Introduction to Fire Protection	3
FFT	1520*	Fundamentals of Fire Prevention	3
FFT	1530*	Fire Arson Investigation	3
FFT	1540*	Hazardous Materials	3
FFT	1550*	Fire Protection Equipment and Systems	3
FFT	1560*	Aircraft Firefighting and Rescue	3
FFT	2510*	Fire Hydraulics and Water Supply	3
FFT	2520*	Fire Service Administration	3
FFT	2530*	Building Construction for Fire Service	3
FFT	2540*	Fire Fighting Tactics and Strategy	3

Required Supportive Courses

PER	2540	Medical First Responder/First Responder	4
		Electives	9

See degree requirements for an Associate in Applied Science Degree on p. 80.

General Education Requirement

See p. 69 and inside back cover.

When all courses marked with an asterisk are completed, students may apply for a

(FFT) FIRE FIGHTER TECHNOLOGY

FFT 1510 ..... 3 Credits
Introduction to Fire Protection

The student will review the historical practices of fire prevention and identify the roles of fire service in society, both in the public and private sector. The structure of fire service organizations and basic field equipment will be identified through lecture and discussion methods as well as field trips. Job opportunities and necessary qualifications will be addressed.

FFT 1520 ..... 3 Credits
Fundamentals of Fire Prevention

The student will learn inspection, surveying and mapping techniques; recognition of fire hazards; ways of engineering solutions to hazards; and enforcement of solutions.

FFT 1530 ..... 3 Credits
Fire Arson Investigation

The student will learn: the role of the fire science/safety specialist in arson investigation; methods and mechanics of protecting, searching and controlling fire scenes; rules of determining point of origin and ignition sources; preservation of evidence; case preparation and court testimony; and state and national arson codes.

FFT 1540 ..... 3 Credits
Hazardous Materials

The student will learn various fire fighting methods relating to hazardous materials, including solids, liquids and gases. Students will also be able to identify the proper storage facilities for these materials. Consideration will be given to the laws, standards and handling techniques of hazardous materials.

FFT 1550 ..... 3 Credits
Fire Protection Systems and Equipment

The student will review the concepts of fire protection systems. Study of the different extinguishing agents and their applications. Emphasis will be placed on sprinkler systems, automatic detection systems and principal alarm systems.

FFT 1560 ..... 3 Credits
Aircraft Fire Fighting and Rescue

The student will review the concepts of aircraft firefighting, aircraft rescue, vehicle set up procedures, forcible entry into aircraft, aircraft shut down, crew extrication, overhaul and protection of the fire scene.

FFT 2510 ..... 3 Credits
Fire Hydraulics and Water Supply

Prerequisite: MAT 1150 or consent of instructor.

This is the study of hydraulics as it applies to the Fire Service Field. Areas of concentration will be the study and application of engine pressures, nozzle pressures, friction losses, rule of thumb, finding gallons of water per minute; pump velocity and water distribution systems.

FFT 2520 ..... 3 Credits
Fire Service Administration

Organization, supervision and effective management of modern Fire Department. Survey of municipal fire problems, insurance rates, legal aspects of fire prevention records and measurements of results.

FFT 2530 ..... 3 Credits
Building Construction for Fire Service

The student will learn the fundamentals of building construction and design, protection features, special considerations and all the terms associated with building construction concerning the fire protection field.

FFT 2540 ..... 3 Credits
Fire Fighting Tactics and Strategy

The student will review the behavior of fire, equipment, manpower and other available resources. Basic Fire Fighting Tactics and Strategy, methods of attack and preplanning possible fire target areas.

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: ___FFT 1510_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION: Student will review the historical practices of fire prevention and identify the roles of fire service in society, both in the public and private sector. The structure of fire service organizations and basic field equipment will be identified through lecture and discussion methods as well as field trips. Job opportunities and necessary qualifications will be addressed.

	Yes	No
Accurate	__✓__	____
Clear	__✓__	____
Current	__✓_	____
NUMBER OF CREDITS:		
Appropriate	__✓__	____

Please explain any No answer:

Please return to _____ ***at*** ____ ***by***_____.
Name Campus Date

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: __FFT 1520_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION: The student will learn inspection, surveying and mapping techniques; recognition of the fire hazards; ways of engineering solutions to hazards; and enforcement of solutions.

	Yes	No
Accurate	_✓___	____
Clear	_✓___	____
Current	_✓___	____
NUMBER OF CREDITS:		
Appropriate	__✓__	____

Please explain any No answer:

Please return to _____ ***a t*** ____ ***by*** _____.
Name Campus Date

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: __FFT 1530_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION: The student will learn the role of the fire science/safety specialist in arson investigation; methods and mechanics of protecting, searching and controlling fire scenes; rules of determining point of origin and ignition sources; preservation of evidence; case preparation and court testimony; and state and national arson codes.

	Yes	No
Accurate	_✓___	____
Clear	_✓___	____
Current	_✓___	____

NUMBER OF CREDITS:

Appropriate	__✓__	____

Please explain any No answer:

Please return to _____ ***a t*** ____ ***by*** _____.
Name Campus Date

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: __FFT 1540_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION: The student will learn various fire fighting methods relating to hazardous materials, including solids, liquids and gases. Students will also be able to identify the proper storage facilities for these materials. Consideration will be give to the laws, standards and handling techniques of hazardous materials.

	Yes	No
Accurate	_✓___	____
Clear	_✓___	____
Current	_✓___	____

NUMBER OF CREDITS:

Appropriate	__✓__	____

Please explain any No answer:

Please return to _____ ***a t*** ____ ***by*** _____.
Name Campus Date

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: __FFT 1550_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION: The student will review the concepts of fire protection systems. Study of the different extinguishing agents and their applications. Emphasis will be placed on sprinkler systems, automatic detection systems and principal alarm systems.

	Yes	No
Accurate	_✓___	____
Clear	_✓___	____
Current	_✓___	____

NUMBER OF CREDITS:

Appropriate	__✓__	____

Please explain any No answer:

Please return to _____ ***a t*** ____ ***by*** _____.
Name Campus Date

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: __FFT 1560_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION: The student will review the concepts of aircraft firefighting, aircraft rescue, vehicle set up procedures, forcible entry into aircraft, aircraft shut down, crew extrication, overhaul and protection of the fire scene.

	Yes	No
Accurate	_✓__	____
Clear	_✓__	____
Current	_✓__	____
NUMBER OF CREDITS:		
Appropriate	__✓__	____

Please explain any No answer:

Please return to _____ ***a t*** ____ ***by*** _____.
Name Campus Date

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: __FFT 2510_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION: Prerequisite: MAT 1150 or consent of instructor.

This is the study of hydraulics as it applies to the Fire Service Field. Areas of concentration will be the study and application of engine pressures, nozzle pressures, friction losses, rule of thumb, finding gallons of water per minute; pump velocity and water distribution systems.

	Yes	No
Accurate	_✓__	____
Clear	_✓__	____
Current	_✓__	____
NUMBER OF CREDITS:		
Appropriate	__✓__	____

Please explain any No answer:

Please return to _____ ***a t*** ____ ***by*** _____.
Name Campus Date

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: __FFT 2520_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION:

Organization, supervision and effective management of modern Fire Department. Survey of municipal fire problems, insurance rates; legal aspects of fire prevention records and measurements of results.

	Yes	No
Accurate	_✓__	____
Clear	_✓__	____
Current	_✓__	____

NUMBER OF CREDITS:

Appropriate	__✓_	____

Please explain any No answer:

Please return to _____ ***a t*** ____ ***by***_____.
Name Campus Date

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: __FFT 2530_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION:

The student will learn the fundamentals of building construction and design, protection features, special considerations and all the terms associated with building construction concerning the fire protection field.

	Yes	No
Accurate	_✓__	____
Clear	_✓__	____
Current	_✓__	____

NUMBER OF CREDITS:

Appropriate	__✓__	____

Please explain any No answer:

Please return to _____ ***a t*** ____ ***by*** _____.
Name Campus Date

DATA COLLECTION

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

FOR: __FFT 2540_____
Course Number

Coordinator: Distribute this form to <u>all full-time members</u> of the Discipline/Program for every course listed in the Catalog.

CATALOG COURSE DESCRIPTION:

The student will review the behavior of fire, equipment, manpower and other available resources. Basic Fire Fighting Tactics and Strategy, methods of attack and preplanning possible fire target areas.

	Yes	No
Accurate	_✓__	____
Clear	_✓__	____
Current	_✓__	____

NUMBER OF CREDITS:

Appropriate	__✓__	____

Please explain any No answer:

Please return to _____ ***a t*** ____ ***by*** _____.
Name Campus Date

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

Coordinator: Complete this form after reviewing the Course Catalog Data Collection forms from members of your Discipline/Program on all of the courses listed in the Catalog.

List every course that is listed in the catalog. Check where revision is indicated or no revisions seem necessary. Please, add lines where needed.

	Revision needed	No Revision necessary
Course Number _FFT 1510	_____	_X
Course Number_FFT 1520	____	__X
Course Number_FFT 1530	_____	___X__
Course Number_FFT 1540	____	__X_
Course Number_FFT 1550	____	__X
Course Number_FFT 1560	___	__X_
Course Number_FFT 2510	____	__X_
Course Number_FFT 2520	____	_ X
Course Number_FFT 2540	____	__ X
Course Number_FFT 2540	____	_ X

COURSE CATALOG DESCRIPTION REVIEW SUMMARY:

Information contained in the course descriptions is current.

CORE REVIEW
A. COURSE CATALOG DESCRIPTION

Coordinator: Complete this form after reviewing the Course Catalog Data Collection forms from members of your Discipline/Program on all of the courses listed in the Catalog.

List every course that is listed in the catalog. Check where revision is indicated or no revisions seem necessary. Please, add lines where needed.

	Revision needed	No Revision necessary
Course Number _FFT 1510	_____	_X
Course Number_FFT 1520	____	__X
Course Number_FFT 1530	_____	___X__
Course Number_FFT 1540	____	__X_
Course Number_FFT 1550	____	__X
Course Number_FFT 1560	___	__X_
Course Number_FFT 2510	____	__X_
Course Number_FFT 2520	____	_ X
Course Number_FFT 2540	____	__X
Course Number_FFT 2540	____	_ X

COURSE CATALOG DESCRIPTION REVIEW SUMMARY:

CORE REVIEW

DATA COLLECTION

B. SYLLABUS REVIEW

FOR: FFT 1510
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification						X			
Course Goals						X			
Grading Standards and Practices						X			
Tentative Schedule of Assignments and Tests						X			
Recommended Items (per Academic Senate)									
Course Name and Number						X			
Instructor, Office Location, Method of Contact						X			
Office Hours						X			
Available Assistance						X			
Course Catalog Description with Prerequisites									
General Education Attributes (where pertinent)									
Required Books and Supplies						X			
List of Supportive Materials (where available)									
Evaluation/Testing System & Policies						X			
Attendance Policy						X			
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions									
Optional Items									
Semester Meeting Times & Room									
Teaching/Learning Strategies									
Applicable Forms Pertinent to Course									
Reference to Student Policies in OCC Catalog									
Policy on Use of Computing Resources									
Description of Required Computing Skills									
Policy on Plagiarism									

CORE REVIEW
B. SYLLABUS REVIEW

DATA COLLECTION

FOR: FFT 1520
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification									
Course Goals									X
Grading Standards and Practices									X
Tentative Schedule of Assignments and Tests									X
Recommended Items (per Academic Senate)									
Course Name and Number									X
Instructor, Office Location, Method of Contact									X
Office Hours									
Available Assistance									
Course Catalog Description with Prerequisites									X
General Education Attributes (where pertinent)									
Required Books and Supplies									
List of Supportive Materials (where available)									
Evaluation/Testing System & Policies									
Attendance Policy									X
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions									
Optional Items									
Semester Meeting Times & Room									
Teaching/Learning Strategies									
Applicable Forms Pertinent to Course									
Reference to Student Policies in OCC Catalog									
Policy on Use of Computing Resources									
Description of Required Computing Skills									
Policy on Plagiarism									

CORE REVIEW

DATA COLLECTION

B. SYLLABUS REVIEW

FOR: FFT 1530
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification	X								
Course Goals	X								
Grading Standards and Practices	X								
Tentative Schedule of Assignments and Tests	X								
Recommended Items (per Academic Senate)									
Course Name and Number	X								
Instructor, Office Location, Method of Contact	X								
Office Hours									
Available Assistance	X								
Course Catalog Description with Prerequisites									
General Education Attributes (where pertinent)									
Required Books and Supplies	X								
List of Supportive Materials (where available)									
Evaluation/Testing System & Policies	X								
Attendance Policy	X								
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions	X								
Optional Items									
Semester Meeting Times & Room									
Teaching/Learning Strategies									
Applicable Forms Pertinent to Course									
Reference to Student Policies in OCC Catalog	X								
Policy on Use of Computing Resources									
Description of Required Computing Skills									
Policy on Plagiarism	X								

CORE REVIEW

DATA COLLECTION

B. SYLLABUS REVIEW

FOR: FFT 1540
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification									
Course Goals								X	
Grading Standards and Practices								X	
Tentative Schedule of Assignments and Tests								X	
Recommended Items (per Academic Senate)									
Course Name and Number								X	
Instructor, Office Location, Method of Contact								X	
Office Hours									
Available Assistance								X	
Course Catalog Description with Prerequisites								X	
General Education Attributes (where pertinent)								X	
Required Books and Supplies								X	
List of Supportive Materials (where available)								X	
Evaluation/Testing System & Policies								X	
Attendance Policy								X	
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions									
Optional Items									
Semester Meeting Times & Room								X	
Teaching/Learning Strategies								X	
Applicable Forms Pertinent to Course								X	
Reference to Student Policies in OCC Catalog								X	
Policy on Use of Computing Resources								X	
Description of Required Computing Skills									
Policy on Plagiarism									

CORE REVIEW

DATA COLLECTION

B. SYLLABUS REVIEW

FOR: FFT 1550
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification									
Course Goals		X							
Grading Standards and Practices		X							
Tentative Schedule of Assignments and Tests		X							
Recommended Items (per Academic Senate)									
Course Name and Number		X							
Instructor, Office Location, Method of Contact		X							
Office Hours									
Available Assistance		X							
Course Catalog Description with Prerequisites		X							
General Education Attributes (where pertinent)									
Required Books and Supplies		X							
List of Supportive Materials (where available)		X							
Evaluation/Testing System & Policies		X							
Attendance Policy		X							
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions									
Optional Items									
Semester Meeting Times & Room									
Teaching/Learning Strategies									
Applicable Forms Pertinent to Course									
Reference to Student Policies in OCC Catalog									
Policy on Use of Computing Resources									
Description of Required Computing Skills									
Policy on Plagiarism		X							

CORE REVIEW

DATA COLLECTION

B. SYLLABUS REVIEW

FOR: FFT 1560
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification							X		
Course Goals							X		
Grading Standards and Practices							X		
Tentative Schedule of Assignments and Tests							X		
Recommended Items (per Academic Senate)									
Course Name and Number							X		
Instructor, Office Location, Method of Contact							X		
Office Hours							X		
Available Assistance									
Course Catalog Description with Prerequisites									
General Education Attributes (where pertinent)									
Required Books and Supplies							X		
List of Supportive Materials (where available)									
Evaluation/Testing System & Policies							X		
Attendance Policy							X		
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions									
Optional Items									
Semester Meeting Times & Room							X		
Teaching/Learning Strategies									
Applicable Forms Pertinent to Course									
Reference to Student Policies in OCC Catalog									
Policy on Use of Computing Resources									
Description of Required Computing Skills									
Policy on Plagiarism							X		

CORE REVIEW

DATA COLLECTION

B. SYLLABUS REVIEW

FOR: FET 2510
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification			X						
Course Goals			X						
Grading Standards and Practices			X						
Tentative Schedule of Assignments and Tests			X						
Recommended Items (per Academic Senate)									
Course Name and Number			X						
Instructor, Office Location, Method of Contact			X						
Office Hours									
Available Assistance			X						
Course Catalog Description with Prerequisites			X						
General Education Attributes (where pertinent)									
Required Books and Supplies			X						
List of Supportive Materials (where available)			X						
Evaluation/Testing System & Policies			X						
Attendance Policy			X						
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions									
Optional Items									
Semester Meeting Times & Room									
Teaching/Learning Strategies									
Applicable Forms Pertinent to Course									
Reference to Student Policies in OCC Catalog									
Policy on Use of Computing Resources									
Description of Required Computing Skills									
Policy on Plagiarism			X						

CORE REVIEW
B. SYLLABUS REVIEW

DATA COLLECTION

FOR: FFT 2520
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification				X					
Course Goals				X					
Grading Standards and Practices				X					
Tentative Schedule of Assignments and Tests				X					
Recommended Items (per Academic Senate)									
Course Name and Number				X					
Instructor, Office Location, Method of Contact				X					
Office Hours				X					
Available Assistance				X					
Course Catalog Description with Prerequisites				X					
General Education Attributes (where pertinent)									
Required Books and Supplies				X					
List of Supportive Materials (where available)									
Evaluation/Testing System & Policies				X					
Attendance Policy				X					
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions									
Optional Items									
Semester Meeting Times & Room				X					
Teaching/Learning Strategies									
Applicable Forms Pertinent to Course									
Reference to Student Policies in OCC Catalog									
Policy on Use of Computing Resources									
Description of Required Computing Skills									
Policy on Plagiarism									

CORE REVIEW

DATA COLLECTION

B. SYLLABUS REVIEW

FOR: FFT 2530
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification				X					
Course Goals				X					
Grading Standards and Practices				X					
Tentative Schedule of Assignments and Tests				X					
Recommended Items (per Academic Senate)									
Course Name and Number				X					
Instructor, Office Location, Method of Contact				X					
Office Hours				X					
Available Assistance									
Course Catalog Description with Prerequisites									
General Education Attributes (where pertinent)									
Required Books and Supplies				X					
List of Supportive Materials (where available)									
Evaluation/Testing System & Policies				X					
Attendance Policy				X					
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions									
Optional Items									
Semester Meeting Times & Room				X					
Teaching/Learning Strategies									
Applicable Forms Pertinent to Course									
Reference to Student Policies in OCC Catalog									
Policy on Use of Computing Resources									
Description of Required Computing Skills									
Policy on Plagiarism									

CORE REVIEW

DATA COLLECTION

B. SYLLABUS REVIEW

FOR: FFT 2540
Course Number

INSTRUCTORS ⇨	CRAY	JOHNSON	NELSON	PFUNDT	SCHWARTZ	SEITZ	SHANK	SMITH	VAN SPARRENTAK
Mandatory Items (per FMA and Federal Law)									
ADA Notification				X					
Course Goals				X					
Grading Standards and Practices				X					
Tentative Schedule of Assignments and Tests				X					
Recommended Items (per Academic Senate)									
Course Name and Number				X					
Instructor, Office Location, Method of Contact				X					
Office Hours				X					
Available Assistance									
Course Catalog Description with Prerequisites				X					
General Education Attributes (where pertinent)									
Required Books and Supplies				X					
List of Supportive Materials (where available)									
Evaluation/Testing System & Policies				X					
Attendance Policy				X					
Safety Instructions									
Disclaimer Allowing for Reasonable Revisions									
Optional Items									
Semester Meeting Times & Room				X					
Teaching/Learning Strategies									
Applicable Forms Pertinent to Course									
Reference to Student Policies in OCC Catalog									
Policy on Use of Computing Resources									
Description of Required Computing Skills									
Policy on Plagiarism									

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 1510

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**100%**
ADA Notification	YES
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**58%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	YES
Available Assistance	YES
Course Catalog Description with Prerequisites	-----
General Education Attributes (where pertinent)	-----
Required Books and Supplies	YES
List of Supportive Materials (where available)	----
Evaluation/Testing System & Policies	YES
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	----
Optional Items	**0 %**
Semester Meeting Times & Room	
Teaching/Learning Strategies	
Applicable Forms Pertinent to Course	
Reference to Student Policies in OCC Catalog	
Policy on Use of Computing Resources	
Description of Required Computing Skills	
Policy on Plagiarism	
Student Bill of Responsibilities	

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 1520

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**75%**
ADA Notification	NO
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**33%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	----
Available Assistance	----
Course Catalog Description with Prerequisites	YES
General Education Attributes (where pertinent)	-----
Required Books and Supplies	----
List of Supportive Materials (where available)	----
Evaluation/Testing System & Policies	----
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	----
Optional Items	**0 %**
Semester Meeting Times & Room	
Teaching/Learning Strategies	
Applicable Forms Pertinent to Course	
Reference to Student Policies in OCC Catalog	
Policy on Use of Computing Resources	
Description of Required Computing Skills	
Policy on Plagiarism	
Student Bill of Responsibilities	

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 1530

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**100%**
ADA Notification	YES
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**58%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	----
Available Assistance	YES
Course Catalog Description with Prerequisites	----
General Education Attributes (where pertinent)	----
Required Books and Supplies	YES
List of Supportive Materials (where available)	----
Evaluation/Testing System & Policies	YES
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	YES
Optional Items	**25%**
Semester Meeting Times & Room	----
Teaching/Learning Strategies	----
Applicable Forms Pertinent to Course	----
Reference to Student Policies in OCC Catalog	YES
Policy on Use of Computing Resources	----
Description of Required Computing Skills	----
Policy on Plagiarism	YES
Student Bill of Responsibilities	----

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 1540

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**75%**
ADA Notification	NO
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**75%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	----
Available Assistance	YES
Course Catalog Description with Prerequisites	YES
General Education Attributes (where pertinent)	YES
Required Books and Supplies	YES
List of Supportive Materials (where available)	YES
Evaluation/Testing System & Policies	YES
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	----
Optional Items	**63%**
Semester Meeting Times & Room	YES
Teaching/Learning Strategies	YES
Applicable Forms Pertinent to Course	YES
Reference to Student Policies in OCC Catalog	YES
Policy on Use of Computing Resources	YES
Description of Required Computing Skills	----
Policy on Plagiarism	----
Student Bill of Responsibilities	----

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 1550

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**75%**
ADA Notification	NO
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**67%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	----
Available Assistance	YES
Course Catalog Description with Prerequisites	YES
General Education Attributes (where pertinent)	----
Required Books and Supplies	YES
List of Supportive Materials (where available)	YES
Evaluation/Testing System & Policies	YES
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	----
Optional Items	**12%**
Semester Meeting Times & Room	----
Teaching/Learning Strategies	----
Applicable Forms Pertinent to Course	----
Reference to Student Policies in OCC Catalog	----
Policy on Use of Computing Resources	----
Description of Required Computing Skills	----
Policy on Plagiarism	YES
Student Bill of Responsibilities	----

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 1560

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**100%**
ADA Notification	YES
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**58%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	YES
Available Assistance	YES
Course Catalog Description with Prerequisites	----
General Education Attributes (where pertinent)	----
Required Books and Supplies	YES
List of Supportive Materials (where available)	----
Evaluation/Testing System & Policies	YES
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	----
Optional Items	**25%**
Semester Meeting Times & Room	YES
Teaching/Learning Strategies	----
Applicable Forms Pertinent to Course	----
Reference to Student Policies in OCC Catalog	----
Policy on Use of Computing Resources	----
Description of Required Computing Skills	----
Policy on Plagiarism	YES
Student Bill of Responsibilities	----

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 2510

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**100%**
ADA Notification	YES
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**66%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	----
Available Assistance	YES
Course Catalog Description with Prerequisites	YES
General Education Attributes (where pertinent)	----
Required Books and Supplies	YES
List of Supportive Materials (where available)	YES
Evaluation/Testing System & Policies	YES
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	----
Optional Items	**12%**
Semester Meeting Times & Room	----
Teaching/Learning Strategies	----
Applicable Forms Pertinent to Course	----
Reference to Student Policies in OCC Catalog	----
Policy on Use of Computing Resources	----
Description of Required Computing Skills	----
Policy on Plagiarism	YES
Student Bill of Responsibilities	----

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 2520

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**100%**
ADA Notification	YES
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**67%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	YES
Available Assistance	YES
Course Catalog Description with Prerequisites	YES
General Education Attributes (where pertinent)	----
Required Books and Supplies	YES
List of Supportive Materials (where available)	----
Evaluation/Testing System & Policies	YES
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	----
Optional Items	**12%**
Semester Meeting Times & Room	YES
Teaching/Learning Strategies	----
Applicable Forms Pertinent to Course	----
Reference to Student Policies in OCC Catalog	----
Policy on Use of Computing Resources	----
Description of Required Computing Skills	----
Policy on Plagiarism	YES
Student Bill of Responsibilities	----

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 2530

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**100%**
ADA Notification	YES
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**50%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	YES
Available Assistance	----
Course Catalog Description with Prerequisites	----
General Education Attributes (where pertinent)	----
Required Books and Supplies	YES
List of Supportive Materials (where available)	----
Evaluation/Testing System & Policies	YES
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	----
Optional Items	**12%**
Semester Meeting Times & Room	YES
Teaching/Learning Strategies	----
Applicable Forms Pertinent to Course	----
Reference to Student Policies in OCC Catalog	----
Policy on Use of Computing Resources	----
Description of Required Computing Skills	----
Policy on Plagiarism	----
Student Bill of Responsibilities	----

CORE REVIEW
B. SYLLABUS REVIEW

DATA ANALYSIS

Coordinator: Use a separate sheet for each course. FFT 2540

	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)	**100%**
ADA Notification	YES
Course Goals	YES
Grading Standards and Practices	YES
Tentative Schedule of Assignments and Tests	YES
Recommended Items (per Academic Senate)	**75%**
Course Name and Number	YES
Instructor, Office Location, Method of Contact	YES
Office Hours	----
Available Assistance	YES
Course Catalog Description with Prerequisites	YES
General Education Attributes (where pertinent)	YES
Required Books and Supplies	YES
List of Supportive Materials (where available)	YES
Evaluation/Testing System & Policies	YES
Attendance Policy	YES
Safety Instructions	----
Disclaimer Allowing for Reasonable Revisions	----
Optional Items	**62%**
Semester Meeting Times & Room	YES
Teaching/Learning Strategies	YES
Applicable Forms Pertinent to Course	YES
Reference to Student Policies in OCC Catalog	YES
Policy on Use of Computing Resources	YES
Description of Required Computing Skills	----
Policy on Plagiarism	----
Student Bill of Responsibilities	----

CORE REVIEW
B. SYLLABUS REVIEW, CONTINUED

Coordinator: After reviewing the Data Analysis forms on all the courses in the Discipline/Program, please summarize your analysis of whether or not there are course syllabi in your Discipline/Program that need revision due to inconsistencies or omissions, or other issues.

SYLLABUS REVIEW SUMMARY:

- **Under mandatory review items, courses FFT 1520, 1540, & 1550 did not contain the ADA notification. That came to 30%. The instructors of these courses will be directed to include this statement in all future syllabi. All other mandatory items were met for a total of 92.5%.**

- **Under recommended items listed, the average for the ten (10) FFT courses was 61% of the twelve (12) items that were listed in the syllabi.**

- **Under the optional items listed, the average for the ten (10) FFT courses were very low, it was only 23% of the items listed were found in the syllabi.**

- **All adjunct faculty (No full time faculty) will be briefed on the ADA notifications annually as a review to ensure it will not be left out in the future. All other items, recommended and optional will be strongly encouraged to be included in their next syllabi for fall semester 2006.**

CORE REVIEW
C. ENROLLMENT TRENDS AND STUDENT RETENTION

Coordinator: The Dashboard report on your Discipline/Program will collect the necessary data in regard to Enrollment Trends and Student Retention. Use this form to review that data in the following areas:

Enrollment (Use the Dashboard data on Average Section Size, Sections Filled to Capacity, Percent of Completed Sections, Percent Change in Headcount, and Percent Change in Credit Hours to discuss this area.)

The FFT program class size is slightly lower than the college average. Some of these problem areas have already been addressed. Class offerings could have been one reason. Instead of running two sections with ten students each, the course will be offered once hopefully with 20 students. So for the 2006-2007 school year class offerings have been restructured to help off set this issue. This should also help the sections filled category. Again percent of completed sections was lower than the college average but with the restructuring it should help. Percent in head count and credit hours is consistent but not as high as college average but will also change. One reason could be that the fire service has steady employment and will never go away.

The fire service is usually population based. Most townships hire one firefighter for every 1000 residents. So when the population rises more firefighters are hired. This is especially true here in Oakland County. This fire service business is not one of productivity where you show a profit or a loss. It's more of an insurance policy to help protect our citizens and their property.

Minority Students (Use the Dashboard data on Minority Students to discuss this area.)

The FFT program minority student enrollment is more that half of what the college reports. I don't think that is a fair comparison. I think we fall more in line of what Oakland county shows for percentages in minority residents. Oakland Counties minority percentage rate for the 2000 census was 17.2%. We still have some catching up to do but it can be done hopefully by additional recruitment and

marketing efforts. Most fire departments have programs to pay for higher education , so what the answer is to this I'm not sure.

Student and Course Success (Use the Dashboard data on Percent of Withdrawals, Percent of Incompletes, and Student Course Completion Rate to discuss this area.)

These three particular areas FFT did very well. One of the main reasons I think is that we have an excellent adjunct faculty most of them are either chiefs or assistant chiefs currently working in the field.

The other reason is that most of the departments have higher education programs and are paying for the tuition. Plus, most departments have the education programs tied to their promotion system. So if they do not finish the course their employees will not get reimbursed for the cost of the class and will not be considered for promotion.

ENROLLMENT TRENDS AND STUDENT RETENTION REVIEW SUMMARY:

Firefighters have odd work schedules which can make it difficult to attend class at times but if we stick to our new class restructuring plan we should see immediate positive results. What else that can affect this category is some departments are short manned so they won't be able to attend class because of the overtime it creates.

If the cities and townships of this county do not introduce a better way to attract qualified minorities we probably won't see too much of a change in this category.

With our present staff and highly motivated students I think this student and course success rate will continue to rate high amongst the college averages.

DATA COLLECTION

CORE REVIEW
D. DISCIPLINE/PROGRAM NEEDS AND RESOURCES

Coordinator: Distribute this form to all full-time and adjunct faculty.

What resources or services does the Discipline/Program need in order to improve instruction? Please explain the reason you are requesting each resource.

Probably more hands on instruction and more practical demonstration equipment. The Drager company, maker and distributor of fire equipment, makes a piece of equipment that demonstrates fire behavior along with vapor level and explosive limits chamber called a "Fishbowl." Very impressive. Very expensive.

More field trips and possibly an internship program where students could actually spend a week or two at a fire department, something similar to a ride along program. Not to fight fires but to observe and learn.

More use of CREST and a classroom with a working lab, similar to a chemistry lab.

What curriculum revisions or development would enhance instruction in your Discipline/Program?

Possibly a dedicated classroom with all the above mentioned items.

Please return to _____ ***at*** ____ ***by*** _____.
Name Campus Date

Program Dashboard
Detail Report

Prefix FFT
Title Fire Fighter Technology

Dashboard Score 7.7

	Program	College Wide
Average Section Size	19.5	23.3
Sections Filled to Capacity	57.0%	88.4%
Percent of Completed Sections	75.0%	89.1%
Weighted Percent Change in Headcount	1.0%	3.5%
Weighted Percent Change in Credit Hours	0.9%	3.0%
Percent of Minority Students	10.7%	27.1%
Percent of Withdrawals	8.6%	16.5%
Percent of Incompletes	0.4%	1.6%
Student Course Completion Rate	76.1%	64.8%

Fire Fighter Related Occupations (2004 through 2014)

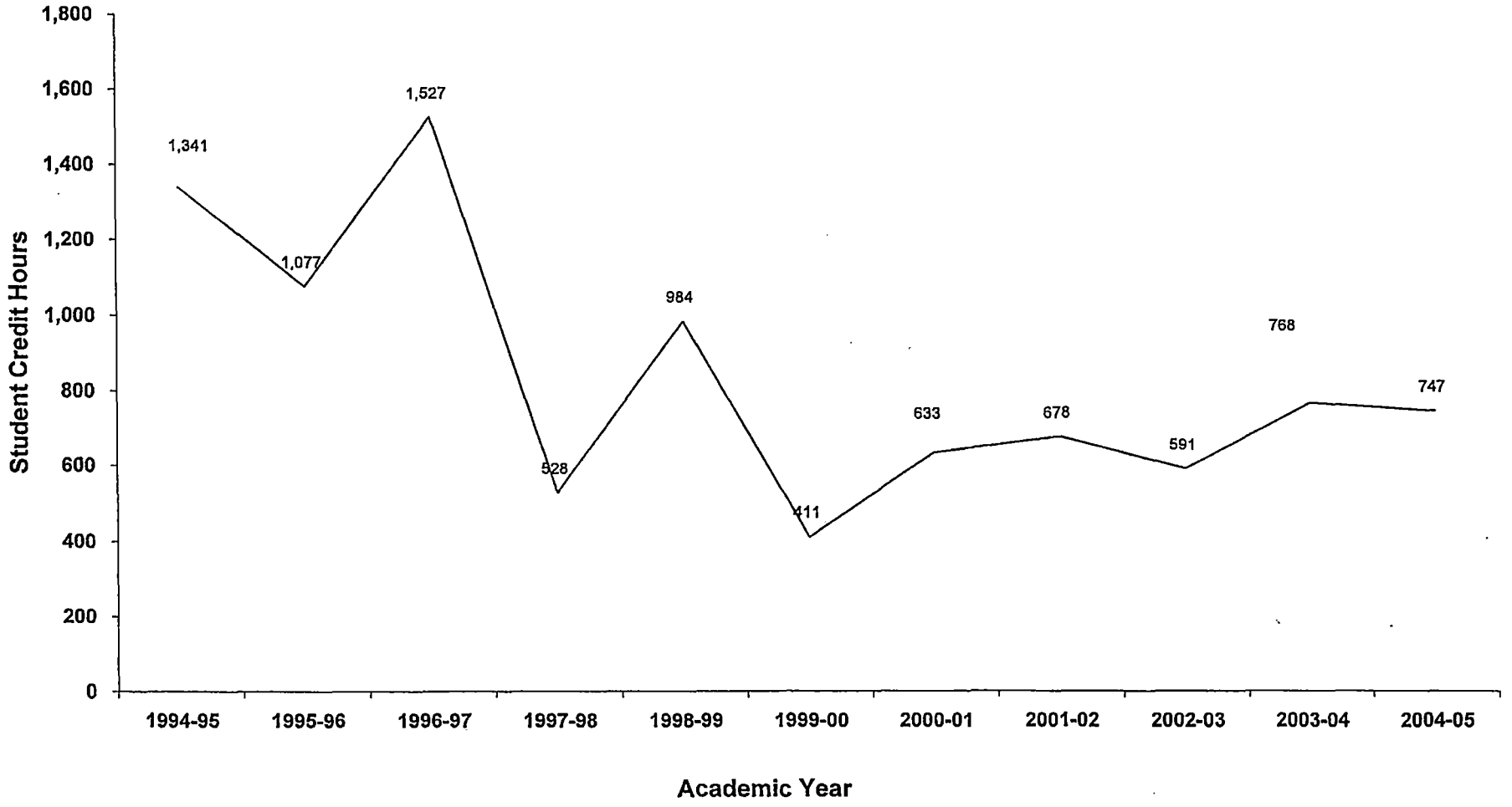
SOC Detail Group

SOC Code	Name	Base Year	Five Year	Ten Year	New Jobs	Rplmnt Jobs	% New Jobs	% Rplmnt	% New & Rplmnt	Earnings
33-1021	First-line supervisors/managers of fire fighting and prevention workers	258	267	285	27	107	10.5%	41.5%	51.9%	$78,369
33-2011	Fire fighters	1,877	1,968	2,117	240	569	12.8%	30.3%	43.1%	$50,782
Totals:		2,135	2,235	2,402	267	676				

Source: OCC, Office of Assessment & Effectivenes (CCSP)

Oakland Community College
Ten-Year Trend in Student Credit Hours
Fire Fighter Technology
1994-95 through 2004-05

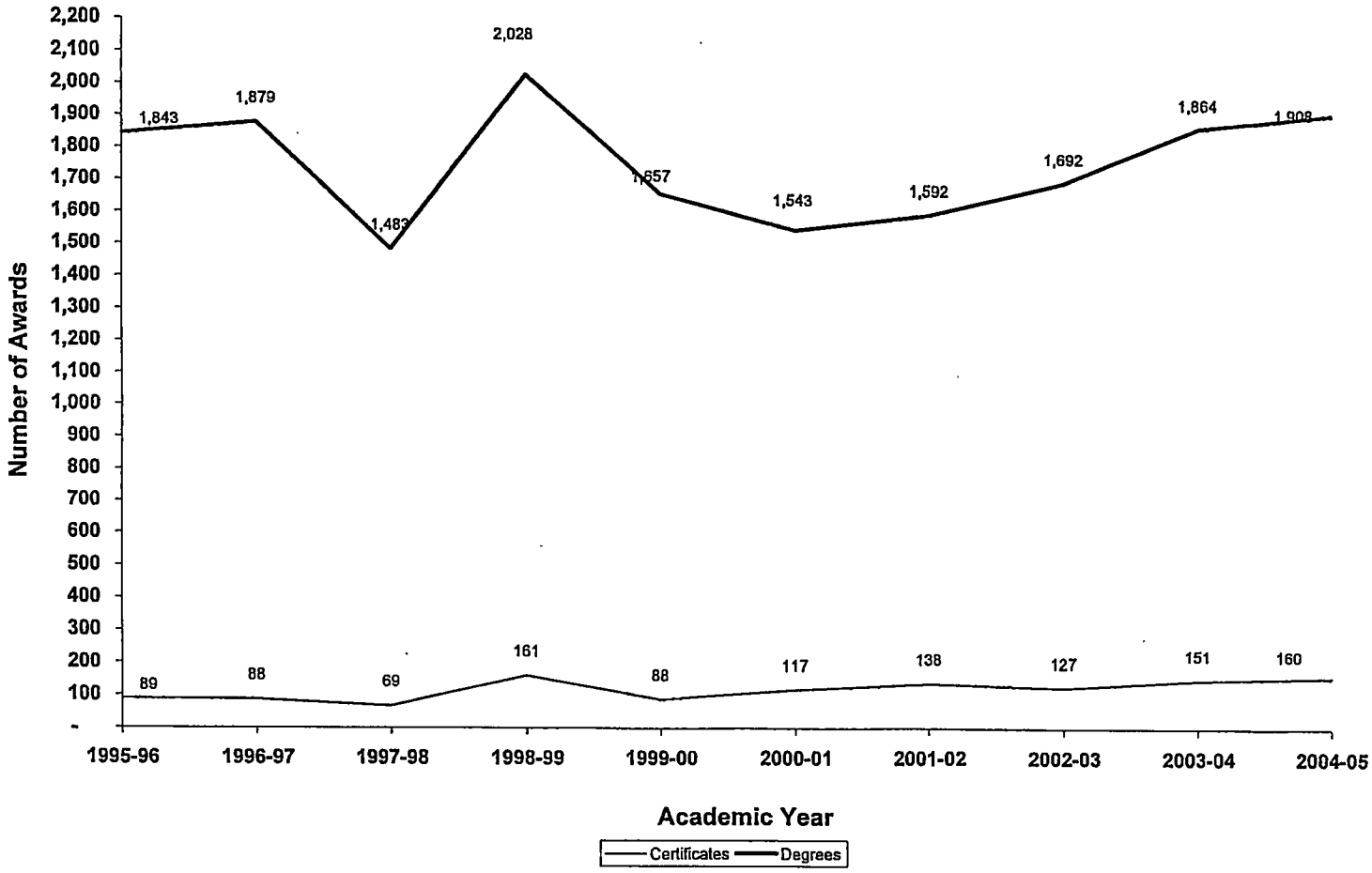
	1994-95 SCH	1995-96 SCH	1996-97 SCH	1997-98 SCH	1998-99 SCH	1999-00 SCH	2000-01 SCH	2001-02 SCH	2002-03 SCH	2003-04 SCH	2004-05 SCH	5-Year % Change	10-Year % Change
Fire Fighter Technology	1,341	1,077	1,527	528	984	411	633	678	591	768	747	81.8	-44.3
College Wide Totals	471,593	451,159	443,471	431,521	440,448	438,997	453,054	447,928	478,827	468,777	472,892	7.7	0.3



Source: OCC, Office of Institutional Research

1/19/2006

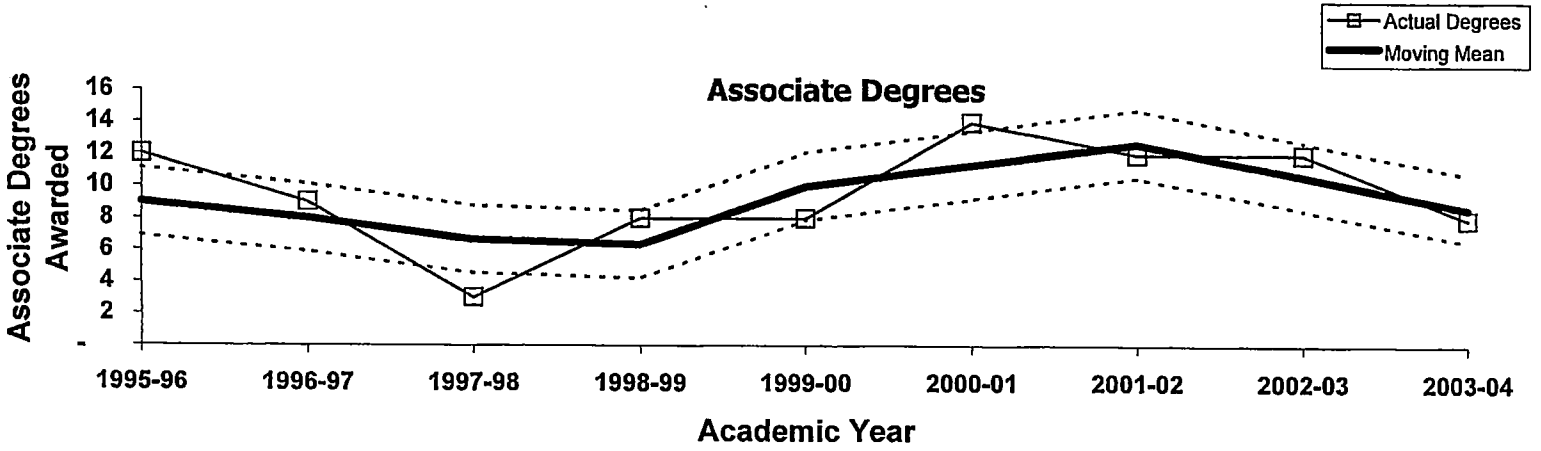
Oakland Community College
Associate Degrees and Certificates Awarded
College-Wide
1995-96 through 2004-05

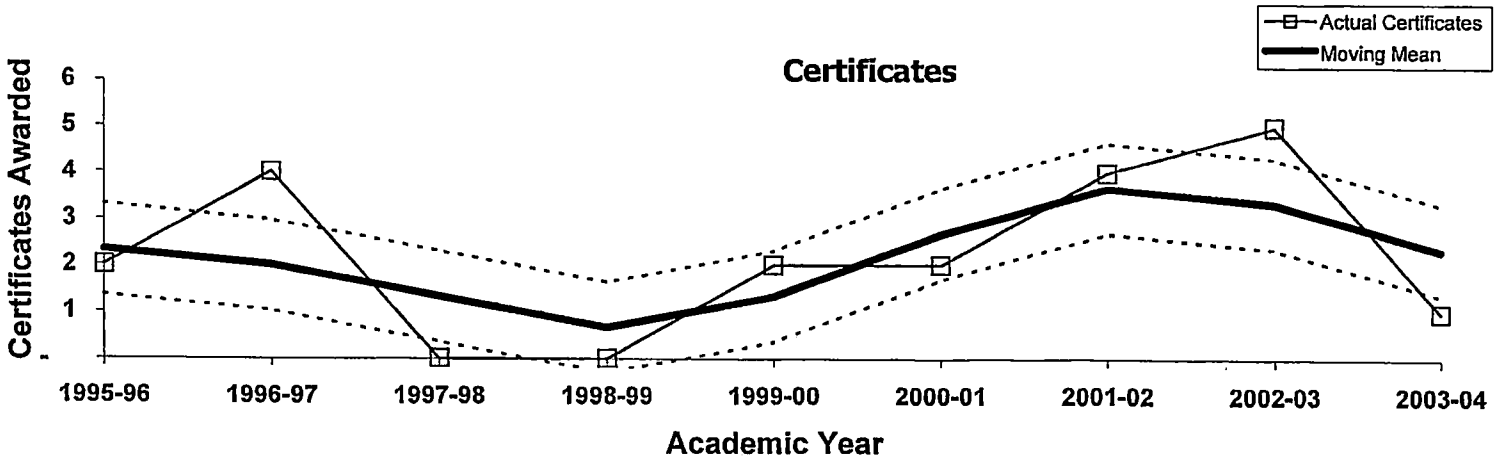


Source: OCC, Office of Institutional Research

1/19/2006

Oakland Community College
Three Year Moving Mean in Annual Awards
Fire Fighter Tech.
1995-96 through 2003-04





Source: OCC, Office of Institutional Research

1/19/2006

CORE REVIEW
D. DISCIPLINE/PROGRAM NEEDS AND RESOURCES

Coordinator: Please summarize the needs, resources, and curriculum actions indicated on the Data Collection forms.

What resources or services does your Discipline/Program need?

Eventually a full time faculty member or a full time coordinator that can split their time with both the credit and non-credit programs. Both programs are tied closely together and should remain that way but there should eventually be a full time person.

What curriculum revisions or development does your Discipline/Program see as beneficial to instruction?

A full time person, a coordinator or program manager

Need to review curriculum frequently by looking at the syllabus and catalog descriptions to make sure they are current and accurate.

Fire Fighter Technology (FFT)

Annual Course Offering Schedule*

Fall Semester

FFT 1510 Intro to Fire Protection
FFT 1530 Fire Arson Investigation
FFT 1540 Hazardous Materials
FFT 1550 Fire Protection Systems and Equipment
FFT 2510 Fire Hydraulics and Water Supply
FFT 2520 Fire Service Administration

Winter Semester

FFT 1510 Intro to Fire Protection
FFT 1520 Fundamentals of Fire Protection
FFT 1530 Fire Arson Investigation
FFT 1560 Aircraft Fire Fighting and Rescue
FFT 2530 Building Construction for Fire Service
FFT 2540 Fire Fighting Tactics and Strategy

*additional sections will be added dependent on student demand

effective Fall Semester 2006

State & County QuickFacts

-
-
-
-

Oakland County, Michigan

People QuickFacts	Oakland County	Michigan
Population, 2004 estimate	1,213,339	10,112,620
Population, percent change, April 1, 2000 to July 1, 2004	1.6%	1.8%
Population, 2000	1,194,156	9,938,444
Population, percent change, 1990 to 2000	10.2%	6.9%
Persons under 5 years old, percent, 2000	6.7%	6.8%
Persons under 18 years old, percent, 2000	25.2%	26.1%
Persons 65 years old and over, percent, 2000	11.3%	12.3%
Female persons, percent, 2000	51.0%	51.0%
White persons, percent, 2000 (a)	82.8%	80.2%
Black or African American persons, percent, 2000 (a)	10.1%	14.2%
American Indian and Alaska Native persons, percent, 2000 (a)	0.3%	0.6%
Asian persons, percent, 2000 (a)	4.1%	1.8%
Native Hawaiian and Other Pacific Islander, percent, 2000 (a)	Z	Z
Persons reporting some other race, percent, 2000 (a)	0.8%	1.3%
Persons reporting two or more races, percent, 2000	1.9%	1.9%
White persons, not of Hispanic/Latino origin, percent, 2000	81.4%	78.6%
Persons of Hispanic or Latino origin, percent, 2000 (b)	2.4%	3.3%
Living in same house in 1995 and 2000', pct age 5+, 2000	55.8%	57.3%
Foreign born persons, percent, 2000	10.0%	5.3%
Language other than English spoken at home, pct age 5+, 2000	12.7%	8.4%
High school graduates, percent of persons age 25+, 2000	89.3%	83.4%
Bachelor's degree or higher, pct of persons age 25+, 2000	38.2%	21.8%
Persons with a disability, age 5+, 2000	164,294	1,711,231
Mean travel time to work (minutes), workers age 16+, 2000	26.5	24.1
Housing units, 2002	502,742	4,331,986
Homeownership rate, 2000	74.7%	73.8%
Housing units in multi-unit structures, percent, 2000	22.4%	18.8%
Median value of owner-occupied housing units, 2000	$181,200	$115,600
Households, 2000	471,115	3,785,661

Persons per household, 2000	2.51	2.56
Median household income, 1999	$61,907	$44,667
Per capita money income, 1999	$32,534	$22,168
Persons below poverty, percent, 1999	5.5%	10.5%

Business QuickFacts	**Oakland County**	**Michigan**
Private nonfarm establishments with paid employees, 2001	42,013	236,711
Private nonfarm employment, 2001	779,062	4,008,572
Private nonfarm employment, percent change 2000-2001	-1.5%	-1.6%
Nonemployer establishments, 2000	84,464	526,958
Manufacturers shipments, 1997 ($1000)	27,172,655	214,900,655
Retail sales, 1997 ($1000)	16,585,042	93,706,078
Retail sales per capita, 1997	$14,175	$9,576
Minority-owned firms, percent of total, 1997	8.6%	7.6%
Women-owned firms, percent of total, 1997	25.9%	27.2%
Housing units authorized by building permits, 2002	5,508	49,968[1]
Federal funds and grants, 2002 ($1000)	4,702,850	55,909,012

Geography QuickFacts	**Oakland County**	**Michigan**
Land area, 2000 (square miles)	873	56,804
Persons per square mile, 2000	1,368.6	175.0
FIPS Code	125	26
Metropolitan or Micropolitan Statistical Area	Detroit-Warren-Livonia, MI Metro Area	

1: Includes data not distributed by county.

(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.

FN: Footnote on this item for this area in place of data
NA: Not available
D: Suppressed to avoid disclosure of confidential information
X: Not applicable
S: Suppressed; does not meet publication standards
Z: Value greater than zero but less than half unit of measure shown
F: Fewer than 100 firms

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, 2000 Census of Population and Housing, 1990 Census of Population and Housing, Small Area Income and Poverty Estimates, County Business Patterns, 1997 Economic Census, Minority- and Women-Owned Business, Building Permits, Consolidated Federal Funds Report, 1997 Census of Governments

Last Revised: Thursday, 12-Jan-2006 13:33:05 EST

Census Bureau Links: . . . . . .

CRC
PART II- PROGRAM REVIEW and PROGRAM REVIEW OF OCCCUPATIONAL EVALUATION (PROE)

Under the provisions of the Carl D. Perkins Vocational and Technical Education Act/Public Law 105-332, if a Discipline/Program is of an occupational nature, a Program Review in Occupational Education (PROE) report is required by the State of Michigan every five (5) years and can be used for the purposes of the Curriculum Review process.

Coordinator: Data Collection and Data Analysis forms for the following review areas are attached.

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY

- Collect information from faculty, students and external community (e.g., advisory committees and accrediting agencies) on your Program curriculum. It is recommended that you send or personally distribute these survey forms in your classes, during your advisory committee meetings, and/or at your departmental/staff meetings. Return these survey forms to the Office of State and Federal Programs.

  Required survey forms:

  ☑ Individual Faculty Perceptions of Occupational Programs & Disciplines Forms

  ☑ Individual Student Perceptions of Occupational Programs & Disciplines Forms

  ☑ Individual Advisory Committee/Industry Perceptions of Occupational Programs & Disciplines Forms

- Analyze the data you have received from the internal and external community surveys. Record your findings on the PROE Data Analysis form and Final Review Summary

F. COMPARABLE COURSES/PROGRAMS AND TRENDS

- Collect information on transferability and articulation from the Counseling Department. Obtain labor market trends from the Office of Assessment & Effectiveness. Identify the job performance requirements with the aid of advisory committees, professional journals, along with student and employer feedback.

- Analyze and summarize these findings.

G. OUTCOMES ASSESSMENT

- Analyze the results of your most recent Program Assessment, particularly evidence regarding the quality of student learning, and recommended action plans.

OAKLAND
COMMUNITY
COLLEGE

FIREFIGHTER TECHNOLOGY PROGRAM
FACULTY EVALUATION
WINTER 2006

Prepared for:
Letyna Roberts
Manager of State and Federal Programs

Prepared by:
Stephanie Wren
Research Analyst
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March 17, 2006

OAKLAND COMMUNITY COLLEGE
FIREFIGHER TECHNOLOGY PROGRAM
FACULTY EVALUATION
WINTER 2006

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OAKLAND COMMUNITY COLLEGE
FIREFIGHER TECHNOLOGY PROGRAM
FACULTY EVALUATION
WINTER 2006

Purpose

The purpose of the study was to compile the data for a summary report of the Firefighting Technology program for the PROE/Curriculum Review process. The final results will be forwarded to Letyna Roberts, Manager of State and Federal Programs, for distribution.

Methodology

Survey responses were collected from 5 faculty members. The survey gathered feedback from the faculty responses on issues such as the courses offered in the program, faculty satisfaction with student preparation for the program, and the quality of instruction. The items were rated 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). Mean responses for each item were calculated and the results are presented below.

OAKLAND COMMUNITY COLLEGE
FIREFIGHER TECHNOLOGY PROGRAM
FACULTY EVALUATION
WINTER 2006

Results

	Question	Mean
1	The program of study in which I teach at Oakland Community College is meeting my expectations as a faculty mer	5
2	The courses offered in the program are preparing the students for the workforce.	4
3	**The program can be more challenging academically for the students.**	**2**
4	**The program can be more competitive with other institutions that offer similar programs.**	**3**
5	I am satisfied with the quality of instruction provided to the students in this program.	5
6	My fellow faculty members in the program are knowledgeable about the course subject-matter.	4
7	I am satisfied with the course offeriengs in this program.	4
8	I feel that the program has a focus on real-world application.	4
9	I feel that the students are prepared for the rigors of the program.	4
10	I am informed about what is happening in this program.	4
11	Opportunities are avaliable for me to make suggestions for improvements in this program.	4
12	I think the department has a commitment ot student success in the program.	5

Note: The mean response for items three and four represents disagreement for the given statements.

- Item three is based on a four-point Likert Scale:
  - 1 = Agree
  - 2 = Neutral
  - 3 = Disagree
  - 4 = Strongly Disagree
    - The average response is that the faculty is neutral to whether the program can be more challenging academically for the students.
- Item four is based on a five point Likert Scale:
  - 1 = Strongly Agree
  - 2 = Agree
  - 3 = Neutral
  - 4 = Disagree
  - 5 = Strongly Disagree
    - The average response is that the faculty is neutral to whether the program can be more competitive with other institutions that offer similar programs.
- A majority of the respondents (60%) felt that feedback from the students indicates that the program is headed in the right direction.

Results Continued

Open-Ended Responses: If there is one thing you would like to change about the program, then explain what it is and how it would enhance the program.

1. I don't think I would change anything in the program. The only possible change to consider would be a full-time faculty for the program.
2. The program needs to be re-worked to be brought in line with federal guidelines (FESHE initiative). The counseling office needs to be better prepared to explain the program prospective to students.
3. Teach awareness of modern and future problems such as CBRNE, terrorism, Unified Command, etc.
4. The class is Fire Investigation—need something (house) for fire sets, hands-on work, digging a fire scene would help. At present I contact departments in the area who have training burns.

OAKLAND
COMMUNITY
COLLEGE

FIREFIGHTER TECHNOLOGY PROGRAM
STUDENT EVALUATION
WINTER 2006

Prepared for:
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March 17, 2006

OAKLAND COMMUNITY COLLEGE
FIREFIGHTER TECHNOLOGY PROGRAM
STUDENT EVALUATION
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FIREFIGHTER TECHNOLOGY PROGRAM
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Purpose

The purpose of the study was to compile the data for a summary report of the Firefighter Technology Program for the PROE/Curriculum Review process. The final results will be forwarded to Letyna Roberts, Manager of State and Federal Programs, for distribution.

Methodology

Survey responses were collected from 66 students. The survey gathered feedback from the students on issues such as the courses offered in the program, student satisfaction with the program, and the quality of instruction. The items were rated 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). Mean responses for each item were calculated and the results are presented below.

OAKLAND COMMUNITY COLLEGE
FIREFIGHTER TECHNOLOGY PROGRAM
STUDENT EVALUATION
WINTER 2006

Results

	Question	Mean
1	My program of study at Oakland Community College is meeting my expectations.	4.2
2	The courses offered in my program of study are preparing me for the workforce.	4.2
3	I would like to change my current program of study because of academic reasons.	4.3
4	I would like to attend another institution because of dissatisfaction with my current program of study at Oakland Co	4.3
5	I am satisfied with the quality of the instructors in my program of study.	4.2
6	I feel that the instructors are knowledgeable about the course subject-matter.	4.4
7	**I am satisfied with the course offerings in mu current program of study at Oakland Community College.**	**3.9**
8	My instructors help me to understand how useful my program of stdy can be in the real-world.	4.2
9	My instructors make the course subject-matter seem interesting.	4.0
10	**I am informed about what is happening in my program.**	**3.8**
11	I think the department is committed to student success in the program.	4.1
12	I am satisfied with my program of study.	4.3

Note: The mean response for items four and five represents disagreement with the given statement.

- The majority of students indicated that they were enrolled in the Firefighter Technology Program (94%) and would pursue a career in firefighting or fire service (89.5%).
- The student responses typically ranged between neutral and strongly agree.
- As noted above, the students are essentially satisfied with the program overall.
    - Comparatively,
        - The students were less satisfied with the course offerings in the program as noted by their mean response of 3.9.
        - And, the students did not feel informed about what was happening with the program as noted by their mean response of 3.8.

Results Continued

Open-Ended Responses:

1. Flying squirrel
2. Great program; it really couldn't get better.
3. Honestly, I am satisfied.
4. I believe that the program I am currently in is an excellent program and there is nothing that I would change.
5. I don't understand the point of the Aircraft class.
6. I think more classes should be utilized such as Public Safety. There are no summer classes and a lot of the classes conflict with a majority of other classes such as Science, History, etc. The programs could use some work.
7. I would like for the teachers to understand that I work full-time and go to college full-time and don't have time to read three chapters for each class.
8. I would like to see more licensing with the completion of some of the classes such as Hat-Mat.
9. I would offer classes more than just once a year. I was forced to take another semester due to the lack of course offerings. I could have graduated this semester if my class would have been offered.
10. I would offer more classes at different times.
11. Less repetitiveness.
12. Maybe more classes in the Fire Science field and other options.
13. More class times.
14. More classes offered through the semester(s) and especially during the summer.
15. Unable to expedite through the program with minimal course offerings.
16. More day classes offered.
17. Offer some summer courses as well.
18. More licensing chances for classes such as Haz-Mat.
19. More licensing for classes such as Haz-Mat.
20. N/A
21. None
22. Nothing I can think of.
23. Nothing to change.
24. Nothing, everything is great.
25. Nothing.
26. OCC rules.
27. Offer fire courses during the summer and spring semesters.
28. Summer classes, non-lecture based classes (actually go out and do something! Not just hear about something!).
29. That fire science classes were offered during the spring and summer.
30. The material is very repetitive from class to class.
31. There needs to be more times for the classes to be offered.
32. Very repetitive.

OAKLAND
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FIREFIGHTER TECHNOLOGY PROGRAM ADVISORY COMMITTEE EVALUATION WINTER 2006

Prepared for:
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March 17, 2006

OAKLAND COMMUNITY COLLEGE
FIREFIGHTER TECHNOLOGY PROGRAM
ADVISORY COMMITTEE EVALUATION
WINTER 2006

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OAKLAND COMMUNITY COLLEGE
FIREFIGHTER TECHNOLOGY PROGRAM
ADVISORY COMMITTEE EVALUATION
WINTER 2006

Purpose

The purpose of the study was to compile the data for a summary report of the Firefighting Technology Program for the PROE/Curriculum Review process. The final results will be forwarded to Letyna Roberts, Manager of State and Federal Programs, for distribution.

Methodology

Survey responses were collected from 6 advisory committee members. The survey gathered feedback from the advisory committee on issues such as the whether the courses were preparing the students for the workforce, the advisory committees input regarding decision making within the program, and the direction of the program. The items were rated 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). Mean responses for each item were calculated and the results are presented below.

OAKLAND COMMUNITY COLLEGE
FIREFIGHTER TECHNOLOGY PROGRAM
ADVISORY COMMITTEE EVALUATION
WINTER 2006

Results

Questions	Mean
1 The program at Oakland Community College is meeting the expectations of the advisory committee.	4.0
2 The courses offered are preparing the students for the workforce.	4.0
3 The advisory committee is informed about the program.	4.0
4 The advisory committee has substantial input into decision-making within the program.	**3.7**
5 The advisory committee is satisfied with the direction of the program.	4.0

- The advisory committee is essential satisfied with the program as noted by an average response of 4 (Agree) on four of the five questions on the survey.
- However, it should be noted that the advisory committee has somewhat of a concern about their level of input into the decision-making process within the program as noted by an average response of 3.7 on item four above.

Results Continued

Open-Ended Responses: If there is one thing the committee would like to change about the program, then explain what it is and how it would enhance the program.

1. Review some of the costs of the programs and compare them to other community colleges such as Lansing Community College, and Schoolcraft Community College. I have heard complaints that OCC's tuition is more costly than others.
2. Somehow influence the Firefighter Training Council to standardize training by making necessary upgrades, but not changing the entire class just because.

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY

Coordinator: After reviewing the Data Collection forms on all the courses in the Discipline/Program, along with the collated data summary, please analyze and summarize these findings.

Faculty Perceptions of Occupational Programs and Disciplines Analysis

On average the faculty seems pleased with the present program. A majority feels it is headed in the right direction with a few minor changes needed.

Student Perception of Occupational Programs and Disciplines Analysis

The students seemed satisfied with the program but the overall feeling is they are being left out of the loop on the direction of the program.

Advisory Committee/Industry Perceptions of Occupational Programs/Disciplines Analysis

A majority of the committee seems satisfied with the overall program. Although some members seemed concerned with their input into the program.

INPUT FROM THE INTERNAL AND EXTERNAL COMMUNITY REVIEW SUMMARY

With the faculty, the changes they would like to see are a full time coordinator/instructor. They do feel left out of the loop at times. A full time person should be able to alleviate some of this. Also, making sure we have the most up to date information to pass on to the students, plus more hands on or lab situations.

Student responses over all were encouraging. They seemed satisfied with the program but they didn't feel informed as they needed to be about what was happening in the program. Again, better communication needed. With a full time person on board this area could be improved.

The advisory committee seems satisfied with the program but feel they do not have enough input into the program. Again, this could improve if there were a full time person but more participation is needed on the advisory committees part. There are approximately 14 members on the advisory committee, we meet six times a year. At some of the meetings there are only four voting members, note even enough for a quorum. This has been a concern

for a long time. There have been some committee member changes this year with more to come. Hopefully their involvement will improve.

F. COMPARABLE COURSES/PROGRAMS AND TRENDS

Coordinator: Answer the following questions.

1. List three institutions to which the courses in your Program transfer, and list the specific courses for each institution. (Consult with the Counseling Department)

    1. Sienna Hts. University
    2. Lawrence The. University
    3. Madonna University

    All FFT courses transfer

2. List the institutions with which articulation agreements exist that include the courses in your Program. (Consult with the Counseling Department)

    1. Sienna Ht. University
    2. Lawrence Tech. University

Use to have an articulation agreement with each but they have long since expired.

3. Provide information regarding labor market trends in your field. (Consult with the Office of Assessment & Effectiveness)

According to the chart submitted by the OA&E under new and replacement jobs will total around 943 firefighting jobs in Oakland County between 2004-2014. That is approximately 94 jobs a year. There are approximately 2000 firefighters in Oakland County according to state records. That is roughly a 5% turn over rate every year. A normal turn over rate for any business is approximately 3%-5% a year. OFTI runs three basic fire academies each year. We graduate between 90-115 cadets each school year. We definitely are not flooding the market in this job category. Also, on completion of the fire academy each student receives ten (10) semester hours towards their FFT degree if they choose to pursue it. These program feed off of each other and most of these students will go into the EMS program after completion of ours.

4. Identify changes in job performance and employer expectations that have occurred within your industry in the past 5 years. (Consult with advisory committees, professional organizations)

The fire service is taking on more roles than ever before. We not only fight fires, we are involved in confined space rescue, open trench rescue, high angle rescue, water rescue, ice rescue, hazmat, CBRNE, & WMD.

F. COMPARABLE COURSES/PROGRAMS AND TRENDS

Coordinator: Please use the data from the Comparable Courses/Programs and Trends Data Collection form to answer the following questions:

1. How does your program serve transferring students? Please discuss.

   No problems in transferring. All fire science programs are very similar

2. Are your articulation agreements current? Please discuss.

   No

3. Discuss employment opportunities for students in both the current and future job market.

   5% turn over rate for each year until 2014.
   Collegegrad.com reports that job opportunities will grow as fast as other occupations until 2012
   That translates into approximately 90-100 firefighter jobs each year in Oakland County.

4. Discuss the changes that will be made in your program in response to current/future employer expectations and market trends.

Objective will be to keep up with the ever growing changes and the newest information that comes out every year that effects the fire department and make sure that that information gets passed on to the students.

Entry level programs such as the Basic Fire Academy are how the students get their jobs. The FFT program is more compared to advanced training for career advancement and promotion opportunities.

COMPARABLE COURSES/PROGRAMS AND TRANSFER REVIEW SUMMARY:

At this point we have not experienced any known problems with transferring students, incoming or out going. Renewing the articulation agreements should probably be looked at but again we haven't experienced any problems with students that have continued on to Sienna Hts., Lawrence Tech. University, or Madonna.

Employment opportunities again will vary with the economy and different hiring requirements for each department in Oakland County. We have a very good reputation not only in Oakland County but around the state and in Canada for both our **credit and non-credit**

programs. We have to keep up with all the changes by making sure we keep our instructors and coordinator up to date by sending them to conferences and seminars on the latest teaching techniques and newest information in the field.

Career Information

Firefighting Occupations

Significant Points:

- Firefighting involves hazardous conditions and long, irregular hours.
- About 9 out of 10 firefighting workers were employed by municipal or county fire departments.
- Applicants for municipal firefighting jobs generally must pass written, physical, and medical examinations.
- Keen competition for jobs is expected.

Nature of the Work

[About this section] [To Top]

Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters help protect the public against these dangers by rapidly responding to a variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries, or perform other vital functions.

During duty hours, firefighters must be prepared to respond immediately to a fire or any other emergency that arises. Because fighting fires is dangerous and complex, it requires organization and teamwork. At every emergency scene, firefighters perform specific duties assigned by a superior officer. At fires, they connect hose lines to hydrants, operate a pump to send water to high pressure hoses, and position ladders to enable them to deliver water to the fire. They also rescue victims and provide emergency medical attention as needed, ventilate smoke-filled areas, and attempt to salvage the contents of buildings. Their duties may change several times while the company is in action. Sometimes they remain at the site of a disaster for days at a time, rescuing trapped survivors and assisting with medical treatment.

Firefighters have assumed a range of responsibilities, including emergency medical services. In fact, most calls to which firefighters respond involve medical emergencies, and about half of all fire departments provide ambulance service for victims. Firefighters receive training in emergency medical procedures, and many fire departments require them to be certified as emergency medical technicians.

Firefighters work in a variety of settings, including urban and suburban areas, airports, chemical plants, other industrial sites, and rural areas like grasslands and forests. In addition, some firefighters work in hazardous materials units that are trained for the control, prevention, and cleanup of oil spills and other hazardous materials incidents. Workers in urban and suburban areas, airports, and industrial sites typically use conventional firefighting equipment and tactics, while forest fires and major hazardous materials spills call for different methods.

In national forests and parks, forest fire inspectors and prevention specialists spot

fires from watchtowers and report their findings to headquarters by telephone or radio. Forest rangers patrol to ensure travelers and campers comply with fire regulations. When fires break out, crews of firefighters are brought in to suppress the blaze using heavy equipment, handtools, and water hoses. Forest firefighting, like urban firefighting, can be rigorous work. One of the most effective means of battling the blaze is by creating fire lines through cutting down trees and digging out grass and all other combustible vegetation, creating bare land in the path of the fire that deprives it of fuel. Elite firefighters, called smoke jumpers, parachute from airplanes to reach otherwise inaccessible areas. This can be extremely hazardous because the crews have no way to escape if the wind shifts and causes the fire to burn toward them.

Between alarms, firefighters clean and maintain equipment, conduct practice drills and fire inspections, and participate in physical fitness activities. They also prepare written reports on fire incidents and review fire science literature to keep abreast of technological developments and changing administrative practices and policies.

Most fire departments have a fire prevention division, usually headed by a fire marshall and staffed by fire inspectors. Workers in this division conduct inspections of structures to prevent fires and ensure fire code compliance. These firefighters also work with developers and planners to check and approve plans for new buildings. Fire prevention personnel often speak on these subjects in schools and before public assemblies and civic organizations.

Some firefighters become fire investigators, who determine the origin and causes of fires. They collect evidence, interview witnesses, and prepare reports on fires in cases where the cause may be arson or criminal negligence. They often are called upon to testify in court.

Working Conditions

[About this section] [To Top]

Firefighters spend much of their time at fire stations, which usually have features common to a residential facility like a dormitory. When an alarm sounds, firefighters respond rapidly, regardless of the weather or hour. Firefighting involves risk of death or injury from sudden cave-ins of floors, toppling walls, traffic accidents when responding to calls, and exposure to flames and smoke. Firefighters may also come in contact with poisonous, flammable, or explosive gases and chemicals, as well as radioactive or other hazardous materials that may have immediate or long-term effects on their health. For these reasons, they must wear protective gear that can be very heavy and hot.

Work hours of firefighters are longer and vary more widely than hours of most other workers. Many work more than 50 hours a week, and sometimes they may work even longer. In some agencies, they are on duty for 24 hours, then off for 48 hours, and receive an extra day off at intervals. In others, they work a day shift of 10 hours for 3 or 4 days, a night shift of 14 hours for 3 or 4 nights, have 3 or 4 days off, and then repeat the cycle. In addition, firefighters often work extra hours at fires and other emergencies and are regularly assigned to work on holidays. Fire lieutenants and fire captains often work the same hours as the firefighters they supervise. Duty hours include time when firefighters study, train, and perform fire prevention duties.

Employment

[About this section] [To Top]

Employment figures in this Handbook statement include only paid career firefighters—they do not cover volunteer firefighters, who perform the same duties and may comprise the majority of firefighters in a residential area. According the

United States Fire Administration, nearly 70 percent of fire companies are staffed by volunteer fire fighters. Paid career firefighters held about 282,000 jobs in 2002. First-line supervisors/managers of firefighting and prevention workers held about 63,000 jobs; and fire inspectors held about 14,000.

About 9 out of 10 firefighting workers were employed by municipal or county fire departments. Some large cities have thousands of career firefighters, while many small towns have only a few. Most of the remainder worked in fire departments on Federal and State installations, including airports. Private firefighting companies employ a small number of firefighters and usually operate on a subscription basis.

In response to the expanding role of firefighters, some municipalities have combined fire prevention, public fire education, safety, and emergency medical services into a single organization commonly referred to as a public safety organization. Some local and regional fire departments are being consolidated into countywide establishments in order to reduce administrative staffs and cut costs, and to establish consistent training standards and work procedures.

Training, Other Qualifications, and Advancement

[About this section] [To Top]

Applicants for municipal firefighting jobs generally must pass a written exam; tests of strength, physical stamina, coordination, and agility; and a medical examination that includes drug screening. Workers may be monitored on a random basis for drug use after accepting employment. Examinations are generally open to persons who are at least 18 years of age and have a high school education or the equivalent. Those who receive the highest scores in all phases of testing have the best chances for appointment. The completion of community college courses in fire science may improve an applicant's chances for appointment. In recent years, an increasing proportion of entrants to this occupation have had some postsecondary education.

As a rule, entry-level workers in large fire departments are trained for several weeks at the department's training center or academy. Through classroom instruction and practical training, the recruits study firefighting techniques, fire prevention, hazardous materials control, local building codes, and emergency medical procedures, including first aid and cardiopulmonary resuscitation. They also learn how to use axes, chain saws, fire extinguishers, ladders, and other firefighting and rescue equipment. After successfully completing this training, they are assigned to a fire company, where they undergo a period of probation.

A number of fire departments have accredited apprenticeship programs lasting up to 5 years. These programs combine formal, technical instruction with on-the-job training under the supervision of experienced firefighters. Technical instruction covers subjects such as firefighting techniques and equipment, chemical hazards associated with various combustible building materials, emergency medical procedures, and fire prevention and safety. Fire departments frequently conduct training programs, and some firefighters attend training sessions sponsored by the U.S. National Fire Academy. These training sessions cover topics including executive development, anti-arson techniques, disaster preparedness, hazardous materials control, and public fire safety and education. Some States also have extensive firefighter training and certification programs. In addition, a number of colleges and universities offer courses leading to 2- or 4-year degrees in fire engineering or fire science. Many fire departments offer firefighters incentives such as tuition reimbursement or higher pay for completing advanced training.

Among the personal qualities firefighters need are mental alertness, self-discipline,

courage, mechanical aptitude, endurance, strength, and a sense of public service. Initiative and good judgment are also extremely important because firefighters make quick decisions in emergencies. Because members of a crew live and work closely together under conditions of stress and danger for extended periods, they must be dependable and able to get along well with others. Leadership qualities are necessary for officers, who must establish and maintain discipline and efficiency, as well as direct the activities of firefighters in their companies.

Most experienced firefighters continue studying to improve their job performance and prepare for promotion examinations. To progress to higher level positions, they acquire expertise in advanced firefighting equipment and techniques, building construction, emergency medical technology, writing, public speaking, management and budgeting procedures, and public relations.

Opportunities for promotion depend upon written examination results, job performance, interviews, and seniority. Increasingly, fire departments use assessment centers, which simulate a variety of actual job performance tasks, to screen for the best candidates for promotion. The line of promotion usually is to engineer, lieutenant, captain, battalion chief, assistant chief, deputy chief, and finally to chief. Many fire departments now require a bachelor's degree, preferably in fire science, public administration, or a related field, for promotion to positions higher than battalion chief. A master's degree is required for executive fire officer certification from the National Fire Academy and for State chief officer certification.

Job Outlook

[About this section] [To Top]

Prospective firefighters are expected to face keen competition for available job openings. Many people are attracted to firefighting because it is challenging and provides the opportunity to perform an essential public service, a high school education is usually sufficient for entry, and a pension is guaranteed upon retirement after 20 years. Consequently, the number of qualified applicants in most areas exceeds the number of job openings, even though the written examination and physical requirements eliminate many applicants. This situation is expected to persist in coming years.

Employment of firefighters is expected to grow about as fast as the average for all occupations through 2012 as fire departments continue to compete with other public safety providers for funding. Most job growth will occur as volunteer firefighting positions are converted to paid positions. In addition to job growth, openings are expected to result from the need to replace firefighters who retire, stop working for other reasons, or transfer to other occupations.

Layoffs of firefighters are uncommon. Fire protection is an essential service, and citizens are likely to exert considerable pressure on local officials to expand or at least preserve the level of fire protection. Even when budget cuts do occur, local fire departments usually cut expenses by postponing equipment purchases or not hiring new firefighters, rather than through staff reductions.

Earnings

[About this section] [More salary/earnings info] [To Top]

Median hourly earnings of firefighters were $17.42 in 2002. The middle 50 percent earned between $12.53 and $22.96. The lowest 10 percent earned less than $8.51, and the highest 10 percent earned more than $28.22. Median hourly earnings were $17.92 in local government, $15.96 in the Federal Government, and $13.58 in State government.

Median annual earnings of first-line supervisors/managers of firefighting and

prevention workers were $55,450 in 2002. The middle 50 percent earned between $43,920 and $68,480. The lowest 10 percent earned less than $34,190, and the highest 10 percent earned more than $84,730. First-line supervisors/managers of firefighting and prevention workers employed in local government earned about $56,390 a year in 2002.

Median annual earnings of fire inspectors were $44,250 in 2002. The middle 50 percent earned between $33,880 and $56,100 a year. The lowest 10 percent earned less than $26,350, and the highest 10 percent earned more than $69,060. Fire inspectors and investigators employed in local government earned about $46,820 a year.

According to the International City-County Management Association, average salaries in 2002 for sworn full-time positions were as follows:

Position	Minimum annual base salary	Maximum annual base salary
Fire chief	$64,134	$82,225
Deputy chief	56,522	72,152
Assistant fire chief	55,645	69,036
Battalion chief	54,935	68,673
Fire captain	45,383	54,463
Fire lieutenant	41,800	49,404
Fire prevention/code inspector	40,387	51,531
Engineer	38,656	48,678

Firefighters who average more than a certain number of hours a week are required to be paid overtime. The hours threshold is determined by the department during the firefighter's work period, which ranges from 7 to 28 days. Firefighters often earn overtime for working extra shifts to maintain minimum staffing levels or for special emergencies.

Firefighters receive benefits that usually include medical and liability insurance, vacation and sick leave, and some paid holidays. Almost all fire departments provide protective clothing (helmets, boots, and coats) and breathing apparatus, and many also provide dress uniforms. Firefighters are generally covered by pension plans, often providing retirement at half pay after 25 years of service or if disabled in the line of duty.

[Please note that the earnings and salary data listed here is usually from government sources and may be dated, so please make adjustments accordingly. If you would like to access current salary data for literally thousands of occupations, access our **Salary Wizard**.]

You may also want to review current **Salary and Hiring Trends** from the Wall Street Journal.

Related Occupations [About this section] [To Top]

Like firefighters, emergency medical technicians and paramedics and police and detectives respond to emergencies and save lives.

Sources of Additional Information [About this section] [To Top]

Information about a career as a firefighter may be obtained from local fire departments and from:

- International Association of Firefighters, 1750 New York Ave. NW., Washington, DC 20006. Internet: http://www.iaff.org/
- U.S. Fire Administration, 16825 South Seton Ave., Emmitsburg, MD 21727.

Information about firefighter professional qualifications and a list of colleges and universities offering 2- or 4-year degree programs in fire science or fire prevention may be obtained from:

- National Fire Academy, Degrees at a Distance Program, 16825 South Seton Ave., Emmitsburg, MD 21727. Internet: http://www.usfa.fema.gov/training/nfa/higher_ed/degree_programs/distance/

*Source: Bureau of Labor Statistics, U.S. Department of Labor. Used by permission.

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Oakland Fire Training Institute Advisory Board
Minutes - December 21, 2005

Members in Attendance

J. Poppelreiter, W.Bloomfield FD ; R. Sinclair, Troy FD; R. Mattot, Bloomfield Hills DPS; R. Sinclair, Troy FD; G. Pfundt, OCC

I. Call to order

The meeting was called to order.

II. Approval of minutes

The minutes of October 19, 2005 meeting were approved at written.

III. General Discussion

A. Basic Fire Academy - G. Pfundt reported that OCC will begin background checks on cadet candidates for the spring academy

B. MFFTC concerns & changes - Gary Pfundt gave a report on the Regional Training Center meeting with the MFFTC staff in Lansing.

The Delmar Fire Officer program was discussed, as well as the possibility of placing Fire Officer and on other programs on line.

Gary Pfundt reported that state funding for Oakland County is $8,530 - fire programs and $2,981 - Hazardous Materials.

OFTI was notified that Groveland Fire Department requests approval and funding for FF I & II. It was suggested that this be handled via email, and that we need cost figures prior to approval.

The meeting was adjourned at 0957. The next meeting will be held at 0900 on February 15 at Oakland Community College/Crest.

OAKLAND COMMUNITY COLLEGE

Oakland Fire Training Institute Advisory Board
Minutes - October 19, 2005

Members in Attendance

Rick Sinclair, Troy Fire Dept.; Jim Poppelreiter, West Bloomfield FD; Joe Schornack, Commerce Twp. FD; Deborah Bayer, OCC; Jim Shank, Inspectors Society

I. Call to order

The meeting was called to order at 0910 hours.

II. Approval of minutes

The minutes of the August 17, 2005 meeting were approved at written.

III. General Discussion

A. The Basic Fire Academy is on schedule and graduation is scheduled for November 4, 2005 at Oakland Community College's Royal Oak Campus.

B. The Fire Fighter I & II academy has 40 pre-registered students And is scheduled to begin November 7, 2005 at the Troy Training Center.

C. Emergency Services update

1. There was a general discussion of budget concerns.

2. There is no current funding for grant programs available.

3. There was a general discussion of doing a background check for future academy students. Students can obtain their own driving record from MSP and a criminal and civil investigation of records from their county of residence. Cost to be incurred by students and could become part of the application process.

4. Director Bayer met with Chief Marinucci of Farmington Hills Fire Department discussed cost of future CPAT testing.

OAKLAND COMMUNITY COLLEGE

Oakland Fire Training Institute Advisory Board
Minutes - August 17, 2005

Members in Attendance

Jim Poppelreiter, West Bloomfield FD; Ed Rigley, MPFFU; Rick Sinclair, Troy Fire Department; Joe Schornack; Jim Shank, OCC
Guests: Rick Matott, Bloomfield Hills DPS; Robert Smith, Orion Twp. FD; Paul Strelchuk, Oakland Twp.

I. Called to order

The meeting was called to order at 0900 hours.

II. Approval of minutes

The minutes of the previous were approved at written.

III. General Discussion

A. Departments that are sponsoring students will be required to provide a letter of sponsorship stating their level of sponsorship.

B. Basic Fire Academy and Fire Fighter I & II academy information updated.

C. Discussed the new layout of the non-credit class schedule now formatted as a combined Police, Fire and EMS CREST schedule. Comments were positive and the new schedules were well received.

D. MFFTC budget concerns were discussed. The need for the budget to be line itemed, instead of combined in the general budget of the Bureau of Construction Codes/Office of Fire Safety, was the main topic of discussion.

Program Assessment Plan
Fire Fighter Technology

Catalog Description

This program leads to an Associate in Applied Science Degree, gives the student an educational background for employment in the fire science area and aids persons already employed to obtain credentials for promotional opportunities. Students who satisfactorily complete the program will exhibit competency in building construction and fire safety, hydraulics, fire protection systems and equipment, handling of hazardous materials, arson investigation, fire safety and administration. Students with a valid current EMT license (which includes the necessary First Aid and Emergency Services/First Responder training), issued by the State of Michigan, will be granted PER 2540 Medical First Responder/First Responder equivalency following the existing vocational model. Students who have completed their State of Michigan Firefighter I and II Certification will be granted credit for FFT 1510 Introduction to Fire Prevention and FFT 1520 Fundamentals of Fire Prevention. Pre-service students must complete FFT 1510 and FFT 1520 prior to enrolling for higher course requirements.

Statement of Purpose

To update existing career professional's skills, and prepare students for careers in the Fire Service industry or enable their transfer to baccalaureate programs.

Learning Outcomes

Graduates will demonstrate qualitative reasoning and analytical skills for organizational problem solving and decision-making.

Benchmark 1

80% or more of the students will be able to triage the scene, prioritize objectives, and detail the appropriate management techniques for each scenario presented in mock emergency response scenarios.

Assessment Method 1

Written exam.

Assessment Date 1 5/1/2005 **Findings Sent to OAE Date 1** 6/1/2005

Benchmark 2

80% or more of the students will be able to triage the scene, prioritize objectives, and detail the appropriate management techniques for each scenario presented in mock emergency response scenarios.

Assessment Method 2

Practical, scenario based exam.

Assessment Date 2 5/1/2005 **Findings Sent to OAE Date 2** 6/1/2005

Learning Outcomes

Graduates will demonstrate the ability to synthesize and apply general concepts to a variety of emergency response situations.

Benchmark 1

80% or more of the students will be able to plan, prioritize objectives, and design the appropriate management system for each scenario presented to industry standards.

Assessment Method 1

Final Practical Exam (FFT 2540). Note: The program will maintain records of the FFT 2540 student's final exams and the instructor's comments. Upon the completion of two course offerings, the program coordinator and instructor will evaluate a random sampling of those exams.

Assessment Date 1 5/1/2005 **Findings Sent to OAE Date 1** 6/1/2005

Learning Outcomes

Graduates will be able to communicate effectively.

Benchmark 1

80% or more of the students will be able to evaluate the scene, manage and deploy emergency workers, call for additional backup, coordinate rescue operations, and report scenario details to instructor.

Assessment Method 1

Final Practical Exam (FFT 2520). Note: The program will keep the results of FFT 2520 student's final exams and the instructor's comments. Upon the completion of two course offerings, the program coordinator and the instructor will evaluate a random sampling of the exams.

Assessment Date 1 5/1/2005 **Findings Sent to OAE Date 1** 6/1/2005

Summary of Program Assessment Results
Fire Fighter Technology

Catalog Description
This program leads to an Associate in Applied Science Degree, gives the student an educational background for employment in the fire science area and aids persons already employed to obtain credentials for promotional opportunities. Students who satisfactorily complete the program will exhibit competency in building construction and fire safety, hydraulics, fire protection systems and equipment, handling of hazardous materials, arson investigation, fire safety and administration. Students with a valid current EMT license (which includes the necessary First Aid and Emergency Services/First Responder training), issued by the State of Michigan, will be granted PER 2540 Medical First Responder/First Responder equivalency following the existing vocational model. Students who have completed their State of Michigan Firefighter I and II Certification will be granted credit for FFT 1510 Introduction to Fire Prevention and FFT 1520 Fundamentals of Fire Prevention. Pre-service students must complete FFT 1510 and FFT 1520 prior to enrolling for higher course requirements.

Program Statement of Purpose
To update existing career professional's skills, and prepare students for careers in the Fire Service industryor enable their transfer to baccalaureate programs.

Learning Outcome
Graduates will be able to communicate effectively.

Benchmark 1
80% or more of the students will be able to evaluate the scene, manage and deploy emergency workers, call for additional backup, coordinate rescue operations, and report scenario details to instructor.

Assessment Method 1
Final Practical Exam (FFT 2520). Note: The program will keep the results of FFT 2520 student's final exams and the instructor's comments. Upon the completion of two course offerings, the program coordinator and the instructor will evaluate a random sampling of the exams.

Benchmark Scheduled To Be Assessed: 5/1/2004

Assessment Results Sent To Office of Assessment & Effectiveness: 6/1/2004

Findings 1
Assessment not implemented.

Learning Outcome
Graduates will demonstrate the ability to synthesize and apply general concepts to a variety of emergency response situations.

Benchmark 1
80% or more of the students will be able to plan, prioritize objectives, and design the appropriate management system for each scenario presented to industry standards.

Assessment Method 1
Final Practical Exam (FFT 2540). Note: The program will maintain records of the FFT 2540 student's final exams and the instructor's comments. Upon the completion of two course offerings, the program coordinator and instructor will evaluate a random sampling of those exams.

Benchmark Scheduled To Be Assessed: 5/1/2004

Assessment Results Sent To Office of Assessment & Effectiveness: 6/1/2004

Findings 1
Assessment not implemented.

Learning Outcome
Graduates will demonstrate qualitative reasoning and analytical skills for organizational problem solving and decision-making.

Benchmark 1
80% or more of the students will be able to triage the scene, prioritize objectives, and detail the appropriate management techniques for each scenario presented in mock emergency response scenarios.

Assessment Method 1
Written exam.

Benchmark Scheduled To Be Assessed: 5/1/2004

Assessment Results Sent To Office of Assessment & Effectiveness: 6/1/2004

Findings 1
Assessment not implemented.

Learning Outcome
Graduates will demonstrate qualitative reasoning and analytical skills for organizational problem solving and decision-making.

Benchmark 2
80% or more of the students will be able to triage the scene, prioritize objectives, and detail the appropriate management techniques for each scenario presented in mock emergency response scenarios.

Assessment Method 2
Practical, scenario based exam.

Benchmark Scheduled To Be Assessed: 5/1/2004

Assessment Results Sent To Office of Assessment & Effectiveness: 6/1/2004

Findings 2
Assessment not implemented.

G. OUTCOMES ASSESSMENT

Coordinator: Complete this form after reviewing your most recent Program Assessment Plan.

1. How have you used the findings from your Program Assessment to improve your program?

   Haven't yet

2. What revisions to your Program Assessment Plan would you suggest?

   Since this is a capstone course, rather than use the final practical exam, we will use the final grade.

3. Discuss the SAGE findings that apply to the instruction in your Program.
   Obtain these findings from the Office of Assessment and Effectiveness.

OUTCOMES ASSESSMENT REVIEW SUMMARY:

Coordinator: Obtain the most recent copy of your Program Assessment from the Office of Assessment and Effectiveness. Please attach it to your Summary Report.

In the fall of 2005, the FFT 2520 class received a "C" or higher 91% for the semester. This is well above our goal of 80%. The winter course was cancelled due to low enrollment .

In the winter of 2005, the FFT 2540 class received a "C" or higher 82% for the semester. This is above our goal of 80%.

In the fall of 2005, the FFT 2540 class received a "C" or higher 100% for the semester. This is above our goal of 80%.

We are still finding a way to capture the information needed to make a better report and to make a positive program change. One of these changes could be to add a full time coordinator/instructor to the program. If this were allowed to happen more time can be dedicated to this discipline and would allow the program to grow like it should. I would like to see a full time coordinator within two years.

Major Highlights

Program Dashboard Report 2003-04

Degree and Credit Hour Trends 2004-05

Occupational Projections (2004 – 2014)

Program Assessment Plan (most current)

Summary of Program Assessment Results

Follow Up

Recommendations

Fire Fighter Technology
Major Highlights
March 2006

Overview

The information contained within this binder represents supporting reports and data associated with the CRC's review of the Fire Fighter Technology program. These documents are intended to provide a historical perspective, as well as an idea of current and future issues which may impact the short and long term viability of the program.

Major Highlights

- Over the past ten years a total of 113 students have completed the Fire Fighter Technology program (21 Certificates and 92 Associate degrees). These figures do not include completers of the non-traditional certificate programs since these graduates are not captured and recorded in Colleague.

- Credit hour enrollment in FFT courses peaked in 1996-97 (1,527), while reaching a low point in 1999-00 (411). During academic year 2004-05 total student credit hours were approximately half of what they were in the peak year of 1996-97.

- During 2003-04 a total of twenty (20) FFT sections were offered, of which five (5) were canceled. This translates into a 75% section completion rate. Furthermore, average section size in FFT courses totaled 19.5 students, slightly below the college-wide average of 23.3. Meanwhile, sections were filled to 57% of capacity during the academic year, well below the college-wide percentage of 88%.

- The percent of minority students (11%) enrolled in FFT courses is below the college-wide average of 27%.

- The withdrawal rate in FFT courses is approximately half (8.6%) of the college-wide course withdrawal rate (16.5%). Furthermore, the percent of students who receive an incomplete (0.4%) is below the college-wide average of 1.6%. Meanwhile, 76% of all students successfully pass FFT courses with a grade of "C" or higher which is above the college-wide average of 65%.

- Occupations associated with Fire Fighting are expected to experience moderate growth (new jobs) over the next ten years. Greater demand will come from the replacement of current workers due to retirement, death, and out migration, etc.

- In total the Fire Fighter Technology program has identified three Learning Outcomes with four Benchmarks spread across these Outcomes. Since January 2005, none of the Benchmarks have been assessed.

Source: OCC, Office of Assessment & Effectiveness

Oakland Community College
Program Dashboard 2003-04
Prototype

This document represents the first Program Dashboard Report for Oakland Community College. As such it should be viewed as a prototype upon which further enhancements and refinements will be made.

The purpose of the program dashboard is to provide a data driven tool designed for the systematic and objective review of all curriculum offerings. Based on a common set of measures which apply to all programs/disciplines the program dashboard will facilitate the systematic identification of well performing as well as ailing curriculum so early intervention (triage) efforts can be undertaken. In a rapidly changing economic and competitive environment it is necessary if not imperative to continually review curriculum offerings annually.

Dashboard reports are a useful tool for monitoring program performance. In addition, they allow for an integrated approach for collecting, presenting, and monitoring data to meet long and short-term programmatic decision-making needs. As in an airplane, the dashboard consists of a wide variety of indicator lights to provide the "pilot" information about the overall performance of the highly complex machine.

As a prototype it is recognized that there are limitations with the current report. Through its introduction and application these limitations will be addressed and adequately resolved in future productions of the program dashboard.

Program Dashboard
Detail Report

Prefix FFT
Title Fire Fighter Technology

Dashboard Score 7.7

	Program	College Wide
Average Section Size	19.5	23.3
Sections Filled to Capacity	57.0%	88.4%
Percent of Completed Sections	75.0%	89.1%
Weighted Percent Change in Headcount	1.0%	3.5%
Weighted Percent Change in Credit Hours	0.9%	3.0%
Percent of Minority Students	10.7%	27.1%
Percent of Withdrawals	8.6%	16.5%
Percent of Incompletes	0.4%	1.6%
Student Course Completion Rate	76.1%	64.8%

Average Section Size

Prefix FFT

Prefix Title Fire Fighter Technology

Total Students	253
Number of Sections	13
Average Section Size	19.5

Definition:

Average number of students per section. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-Tenth-Day of each term.

Methodology:

Total duplicated student headcount divided by total capacity of all sections over an academic year. Currently (2003-04 data) does not take into account the differences between "A" and "B" sections.

Sections Filled to Capacity

Prefix FFT

Prefix Title Fire Fighter Technology

Total Students	253
Total Capacity	444
Sections Filled To Capacity	57.0%

Definition:

The percent of all available seats which are filled on the terms official census date. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term.

Methodology:

Total number of sections (credit courses only) that are filled to their designated capacity e.g. allocated seats divided by the total number of available seats in all sections throughout the academic year (July 1 through June 30). In other words, how many sections are filled to their capacity on the sections 1/10 day out of all sections? Include sections that are more than filled / overflowing in calculation.

One-Tenth Day data shows the capacity filled numbers at approximately 3 weeks after the Fall and Winter terms begin; and 1 week after the Summer I and II terms begin. This data will not provide additional enrollment data if the sections begin after the one-tenth day.

While a section may only have a few students enrolled in it the college is able to designate some sections as 'full' so that they are not cancelled (per OCCFA Master Agreement). Therefore some disciplines may show low fill capacity rates, and the college never cancelled the sections or condense the students into fewer sections offering the same course.

Percent of Completed Sections

Prefix FFT

Prefix Title Fire Fighter Technology

Active Sections	15
Cancelled Sections	5
Total Sections	20
Percent of Completed Sections	75.0%

Definition:

Of all offered sections, the percent of sections that are completed (not cancelled). Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session, after grades are posted.

Methodology:

Annually, the total number of offered credit sections that are completed. Formula = number of completed credit sections divided by the total number of offered credit sections. In other words, the percent of these sections that are not cancelled.

Weighted Percent Change in Headcount

Prefix FFT

Prefix Title Fire Fighter Technology

2000-01 Headcount	213
2001-02 Headcount	230
2002-03 Headcount	198
2003-04 Headcount	253

Three Year Average Change 13

Weighted Percent Change in Headcount 1.0%

Definition:

Percent change in total student headcount based on a three year weighted average. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term.

Methodology:

In order to establish a meaningful statistic which applies to large as well as small disciplines/programs a "Weighted Percent Change" figure was calculated for this measure. The following series of formulas were applied:

First, a Three Year Average Change was calculated. The difference between year 2 and year 1 was added to the difference between year 3 and year 2, as well as added to the difference between year 4 and year 3. This sum total was then divided by 3 to obtain the Three Year Average Change. (Three Year Average Change = (year 2 – year 1) + (year 3 -year 2) + (year 4 - year 3) / 3)

Next, the Three Year Average Change was multiplied by the relative size of the discipline based on the proportion of students enrolled in the discipline. This resulted in the Weighted Change statistic. (Weighted Change = Three Year Average Change X Discipline Proportion)

Next, the Three Year Average Percent Change was calculated. The Three Year Average Change (see above) was divided by the average enrollment in the discipline/program over the past three years. (Three Year Average Percent Change = Three Year Average Change / ((year 2 + year 3 + year 4) / 3))

Finally, the Weighted Percent Change was derived by multiplying the Three Year Average Percent Change times the relative proportion of the discipline. (Weighted Percent Change = Three Year Average Percent Change X Weighted Change)

Weighted Percent Change in Credit Hours

Prefix FFT

Prefix Title Fire Fighter Technology

2000-01 Credit Hours	639
2001-02 Credit Hours	690
2002-03 Credit Hours	594
2003-04 Credit Hours	759

Three Year Average Change 40

Weighted Percent Change in Credit Hours 0.9%

Definition:

Percent change in total student credit hours based on a three year weighted average. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term.

Methodology:

In order to establish a meaningful statistic which applies to large as well as small disciplines/programs a "Weighted Percent Change" figure was calculated for this measure. The following series of formulas were applied:

First, a Three Year Average Change was calculated. The difference between year 2 and year 1 was added to the difference between year 3 and year 2, as well as added to the difference between year 4 and year 3. This sum total was then divided by 3 to obtain the Three Year Average Change. (Three Year Average Change = (year 2 – year 1) + (year 3 -year 2) + (year 4 - year 3) / 3)

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Finally, the Weighted Percent Change was derived by multiplying the Three Year Average Percent Change times the relative proportion of the discipline. (Weighted Percent Change = Three Year Average Percent Change X Weighted Change)

Percent of Minority Students

Prefix FFT

Prefix Title Fire Fighter Technology

Minority Students	12
Total Students	112
Percent of Minority Students	10.7%

Definition:

The percent of students who are minority. Minority status is self-reported by the student and includes: African American, Asian, Hispanic, Native American Indian and Other. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term.

Methodology:

Percentages are based on those students enrolled on the terms official census date (one tenth day) and excludes missing data.

Percent of Withdrawals

Prefix FFT

Prefix Title Fire Fighter Technology

Total Withdrawals 21

Total Grades 243

Percent of Withdrawals 8.6%

Definition:

The percent of students who withdraw from their course after the term begins. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session files, after grades are posted.

Methodology:

Percent of withdrawals is derived by dividing the total number of student initiated withdrawals by the total number of grades and marks awarded throughout the academic year. The Withdrawal-Passing (WP), and Withdrawal-Failing (WF) are considered Withdrawals (W). Meanwhile, calculations exclude: Audit (AU), Not Attended (N), and Not Reported (NR).

Percent of Incompletes

Prefix FFT

Prefix Title Fire Fighter Technology

Total Incompletes 1

Total Grades 243

Percent of Incompletes 0.4%

Definition:

The percent of students who receive an incomplete in their course. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session files, after grades are posted.

Methodology:

Percent of incompletes is derived by dividing the total number of incompletes by the total number of grades and marks awarded throughout the academic year. The Continuous Progress (CP) grade is considered an Incomplete (I). Meanwhile, calculations exclude: Audit (AU), Not Attended (N), and Not Reported (NR).

Student Course Completion Rate

Prefix FFT

Prefix Title Fire Fighter Technology

Successful Grades	185
Total Student Grades	243
Student Course Completion Rate	76.1%

Definition:

The percent of students who successfully complete a course with a grade of "C" or higher. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session files, after grades are posted.

Methodology:

Student success rates are based on end of session data after all grades have been posted. Data includes grades from the entire academic year (Summer II, Fall, Winter, and Summer I). The following grades/marks are excluded from the calculation: Audit (AU), Not Attended (N) and Not Reported (NR).

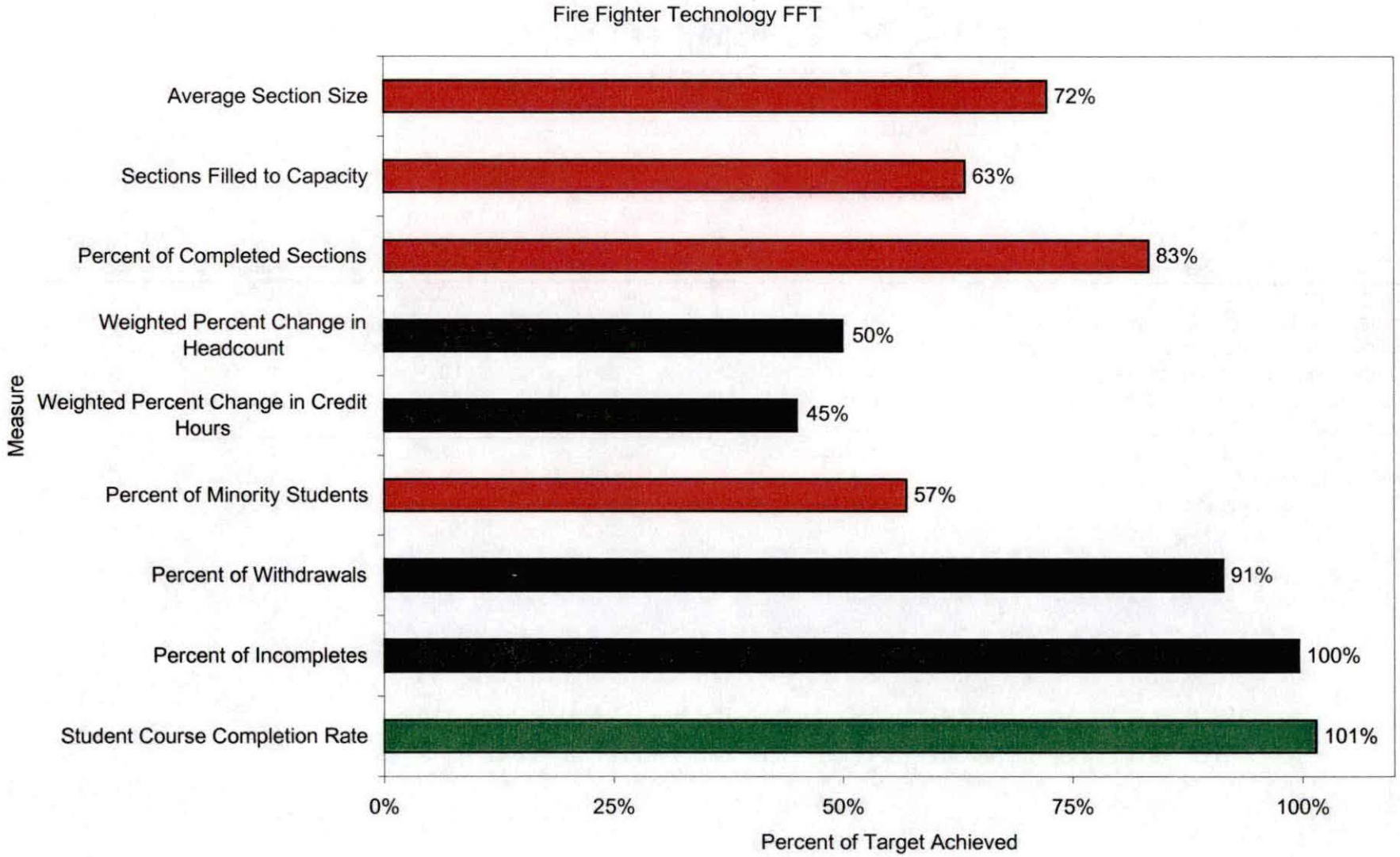
Oakland Con unity College
Program Dashboard Report
2003-04

Fire Fighter Technology FFT
Dashboard Score: 7.70

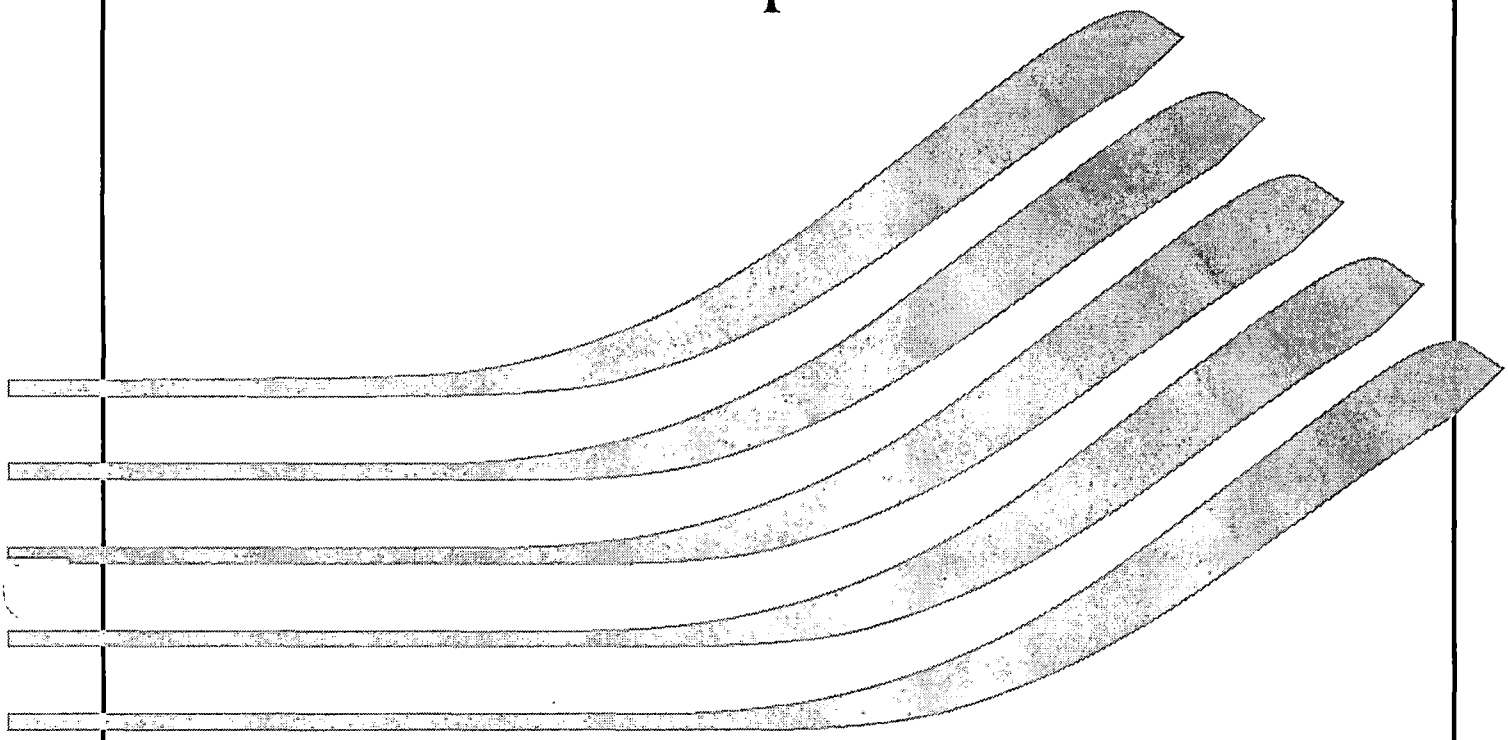
Measures	Current Score	Benchmarks Trouble Score	Target	Percent of Target Achieved	Weight	Weighted Score
Average Section Size	19.5	22.5	27.0	72.2%	8.3%	0.60
Sections Filled to Capacity	57.0%	75.0%	90.0%	63.3%	7.9%	0.50
Percent of Completed Sections	75.0%	75.0%	90.0%	83.3%	8.8%	0.73
Weighted Percent Change in Headcount	1.0%	0.5%	2.0%	50.0%	12.7%	0.64
Weighted Percent Change in Credit Hours	0.9%	0.5%	2.0%	45.0%	10.8%	0.49
Percent of Minority Students	10.7%	16.9%	18.8%	56.9%	6.9%	0.39
Percent of Withdrawals	8.6%	15.0%	0.0%	91.4%	16.2%	1.48
Percent of Incompletes	0.4%	3.0%	0.0%	99.6%	6.8%	0.68
Student Course Completion Rate	76.1%	60.0%	75.0%	101.5%	21.6%	2.19

Source: Office of Assessment and Effectiveness
Updated On: 2/24/2006

Oakland Con nity College
Percent of Target Achieved
2003-04



Institutional Research Report



Fire Fighter Technology
Degree and Credit Hour Trends Reports
for
Curriculum Review Committee

OAKLAND
COMMUNITY
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OAKLAND
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Degree Trends Report

Fire Fighter Tech.

FFT

2004-05

Prepared by:
Oakland Community College
Office of Institutional Research
January 19, 2006

Oakland Community College
Degree Trends Report
Fire Fighter Tech. (FFT)
1995-96 through 2004-05

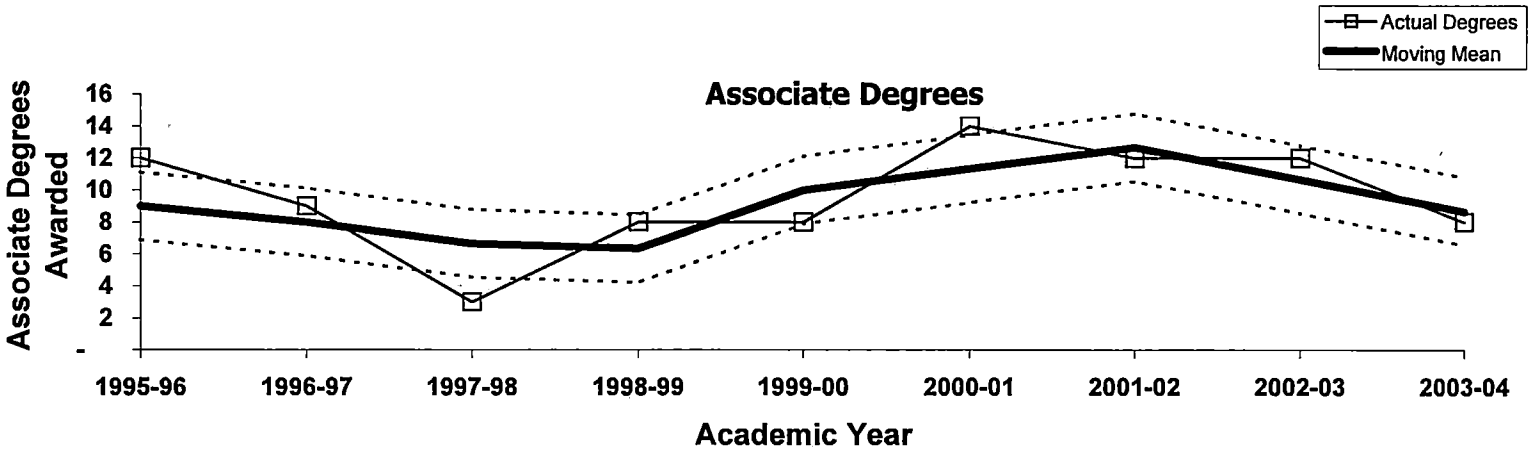
The Degree Trends Report is developed by the Office of Institutional Research based on data compiled from official college records which are submitted to the State of Michigan for the IPEDS (Integrated Post-Secondary Education System) Annual Degrees Conferred Report. The Degree Trends Report examines trends of OCC degrees, based on specific programs. The standard format offers information about certificates and associate degrees awarded. In the event that a given program offers only a certificate or an associate degree, information describing the other type of award will not be shown.

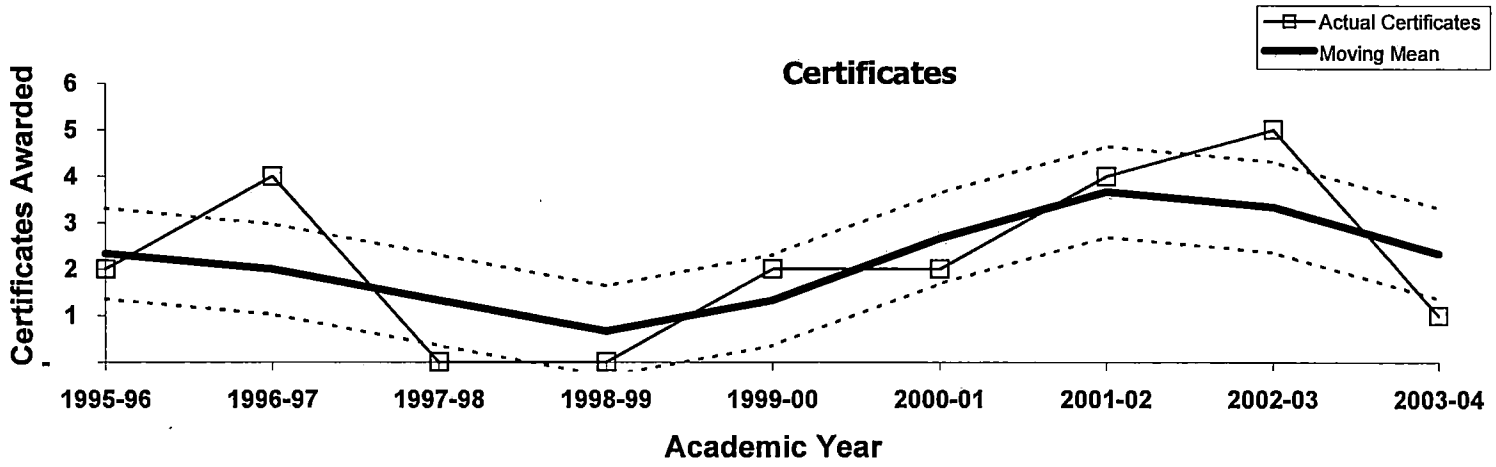
Trends over a specified period of time are illustrated by the following graphs for Fire Fighter Tech. (FFT)

- Ten-year trend showing the annual awards conferred in Fire Fighter Tech.
- Rate of change in annual awards conferred in Fire Fighter Tech.
- The three-year Moving Mean for annual awards conferred in Fire Fighter Tech.
- Ten-year trend in awards conferred collegewide.

Questions regarding this report can be forwarded to the Office of Institutional Research at (248) 341-2123.

Oakland Community College
Three Year Moving Mean in Annual Awards
Fire Fighter Tech.
1995-96 through 2003-04

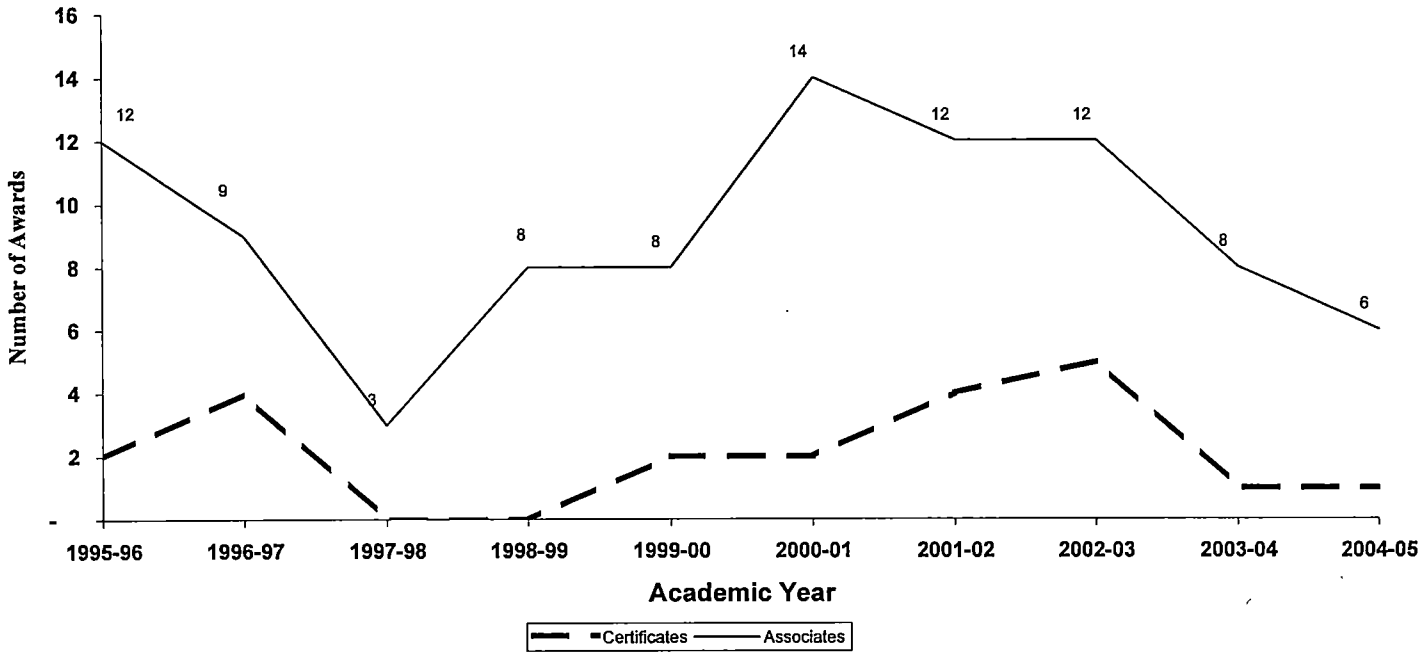




Source: OCC, Office of Institutional Research

1/19/2006

Oakland Community College
Associate Degrees and Certificates Awarded
Fire Fighter Tech.
1995-96 through 2004-05



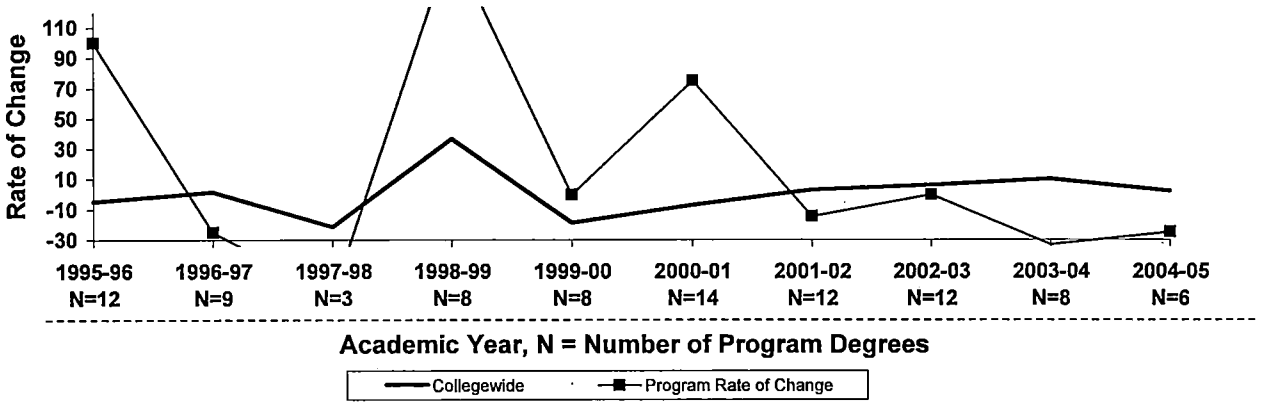
Academic Yr.	Certificates	Associates
1995-96	2	12
1996-97	4	9
1997-98	0	3
1998-99	0	8
1999-00	2	8
2000-01	2	14
2001-02	4	12
2002-03	5	12
2003-04	1	8
2004-05	1	6

Source: OCC, Office of Institutional Research

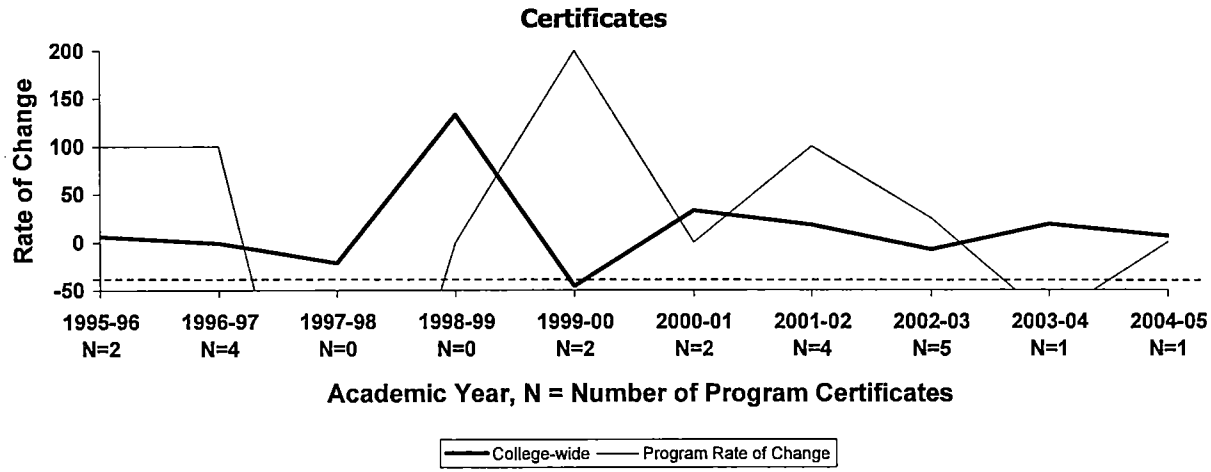
1/19/2006

Oakland Community College
Rate of Change in Annual Awards
College-Wide
1995-96 through 2004-05

Associate Degrees



Certificates



Source: OCC, Office of Institutional Research

1/19/2006

OAKLAND
COMMUNITY
COLLEGE

Credit Hour Trends Report
Fire Fighter Technology
FFT
2004-05

Prepared by:
Oakland Community College
Office of Institutional Research
January 19, 2006

Oakland Community College
Credit Hour Trends Report
Fire Fighter Technology
1994-95 through 2004-05

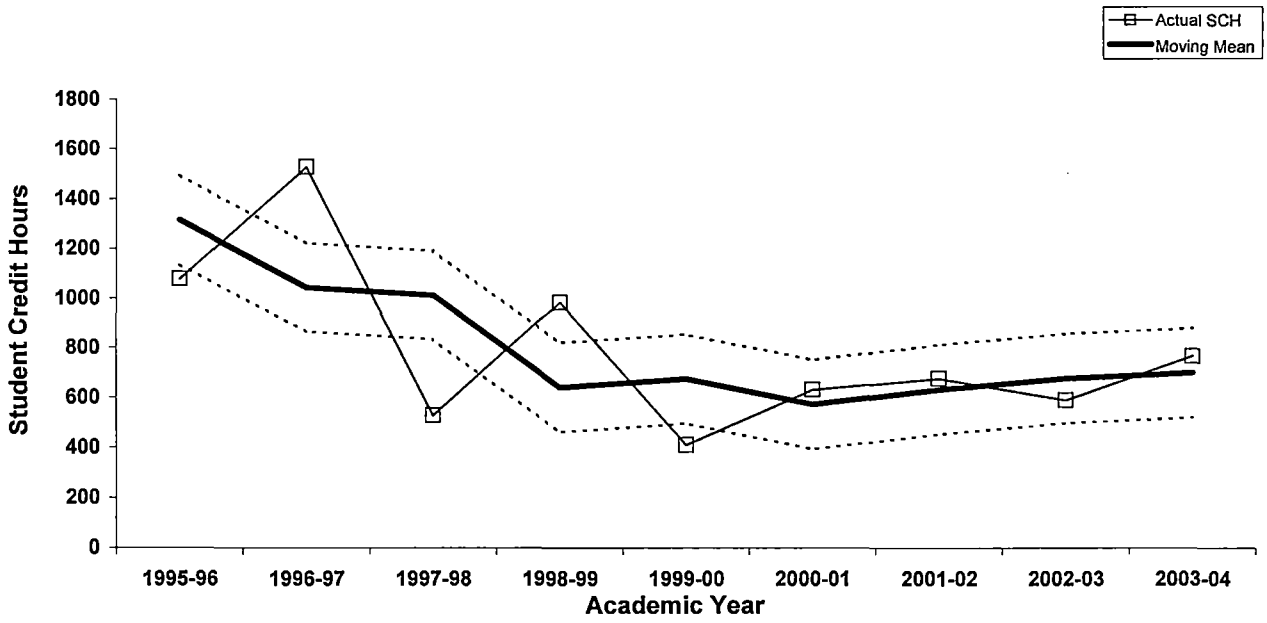
Each year the Office of Institutional Research prepares the Credit Hour Trends Report, based on data submitted to the State of Michigan in the annual ACS-6 (Activities Classification Structure) process. This report is based on each course section's official count date (1/10th Day). The Credit Hour Trends Report examines annual (July 1 - June 30) enrollment trends of OCC disciplines, based on course prefix codes.

Trends over a specified period of time are illustrated by the following graphs for Fire Fighter Technology.

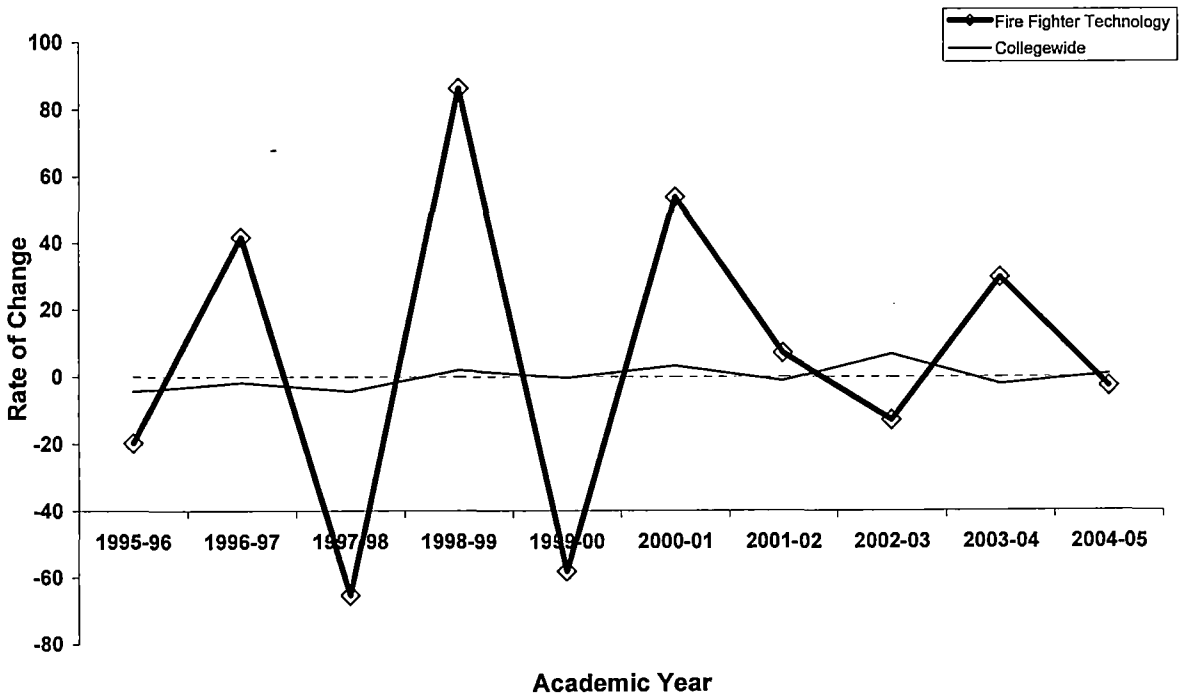
- Graph depicting ten-year trend in student credit hours generated by Fire Fighter Technology
- Graphs depicting three-year moving mean and rate of change in student credit hours for Fire Fighter Technology.
- Ten-year trend in annual credit hours generated Collegewide.

Questions regarding this report can be forwarded to the Office of Institutional Research at (248) 341-2123.

Oakland Community College
Three-Year Moving Mean
Fire Fighter Technology
1995-96 through 2003-04



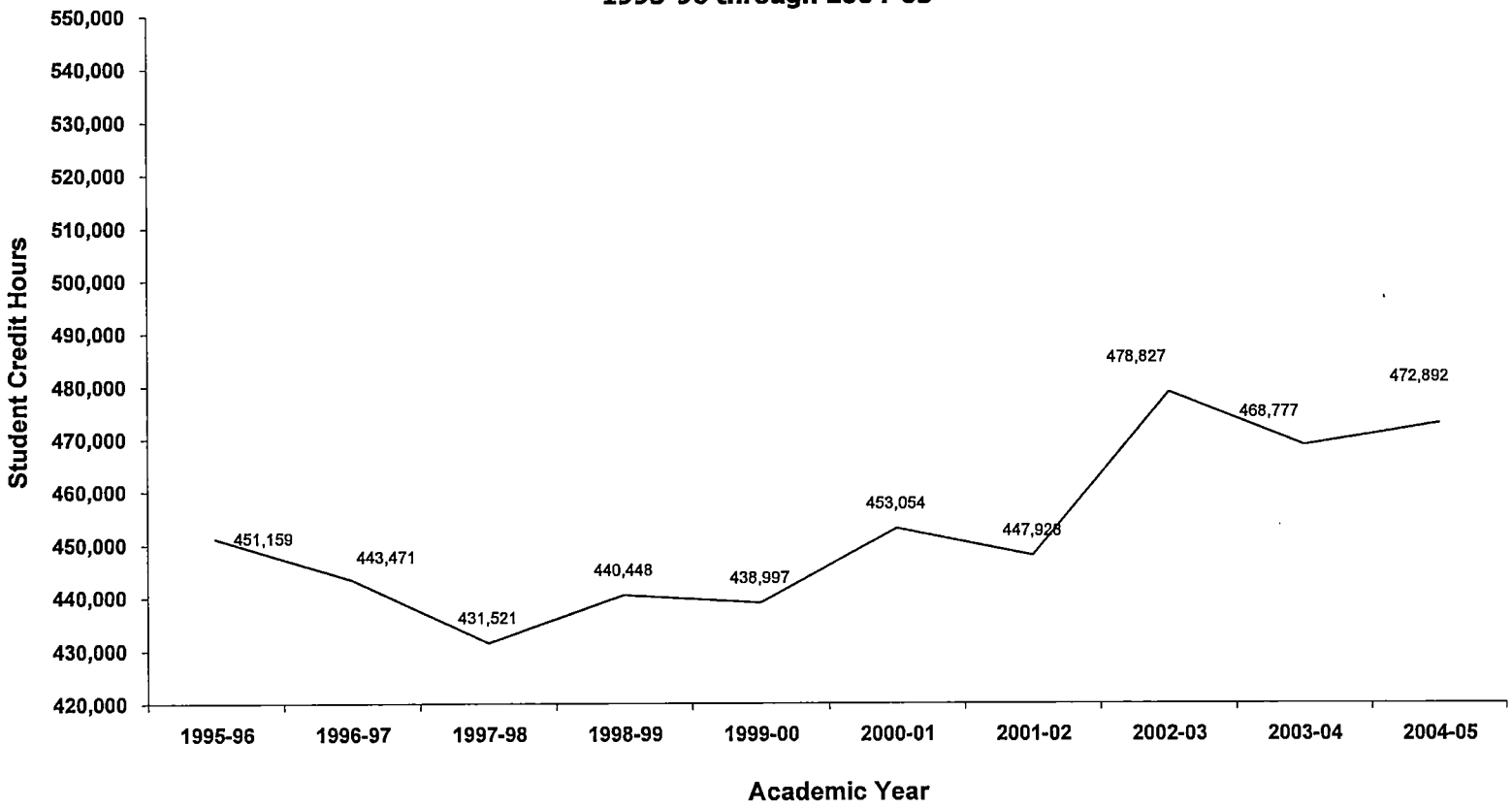
Rate of Change in Student Credit Hours 1995-96 through 2004-05



Source: OCC, Office of Institutional Research

1/19/2006

Oakland Community College
Ten-Year Trend in Student Credit Hours
College-Wide
1995-96 through 2004-05



1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
451,159	443,471	431,521	440,448	438,997	453,054	447,928	478,827	468,777	472,892

Source: OCC, Office of Institutional Research

1/19/2006

Occupational Projections
(2004 – 2014)

The following projections are for those occupations most closely associated with this program. However, the extent to which specific OCC programs lead to jobs reflected within SOC codes is highly dependent upon the way in which the U.S. Department of Labor groups specific occupations.

When possible, projections are presented at four distinct levels based on U.S. Department of Labor Standard Occupational Code (SOC) groups e.g. Major (N = 23), Minor (N = 89), Broad (N = 396), and Detailed (N = 710).

Projections are highly subject to change based on emerging economic, political and social forces.

These projections reflect the four county region of Oakland, Macomb, Livingston and Wayne counties.

Projections are based on data from 24 major data sources, including the U.S. Department of Commerce, Bureau of Labor Statistics (BLS), and Census data. To forecast occupational demand at the county level, BLS data are regionalized and adjusted for emerging technological changes, the age of workers by occupation, and other factors affecting occupational demand.

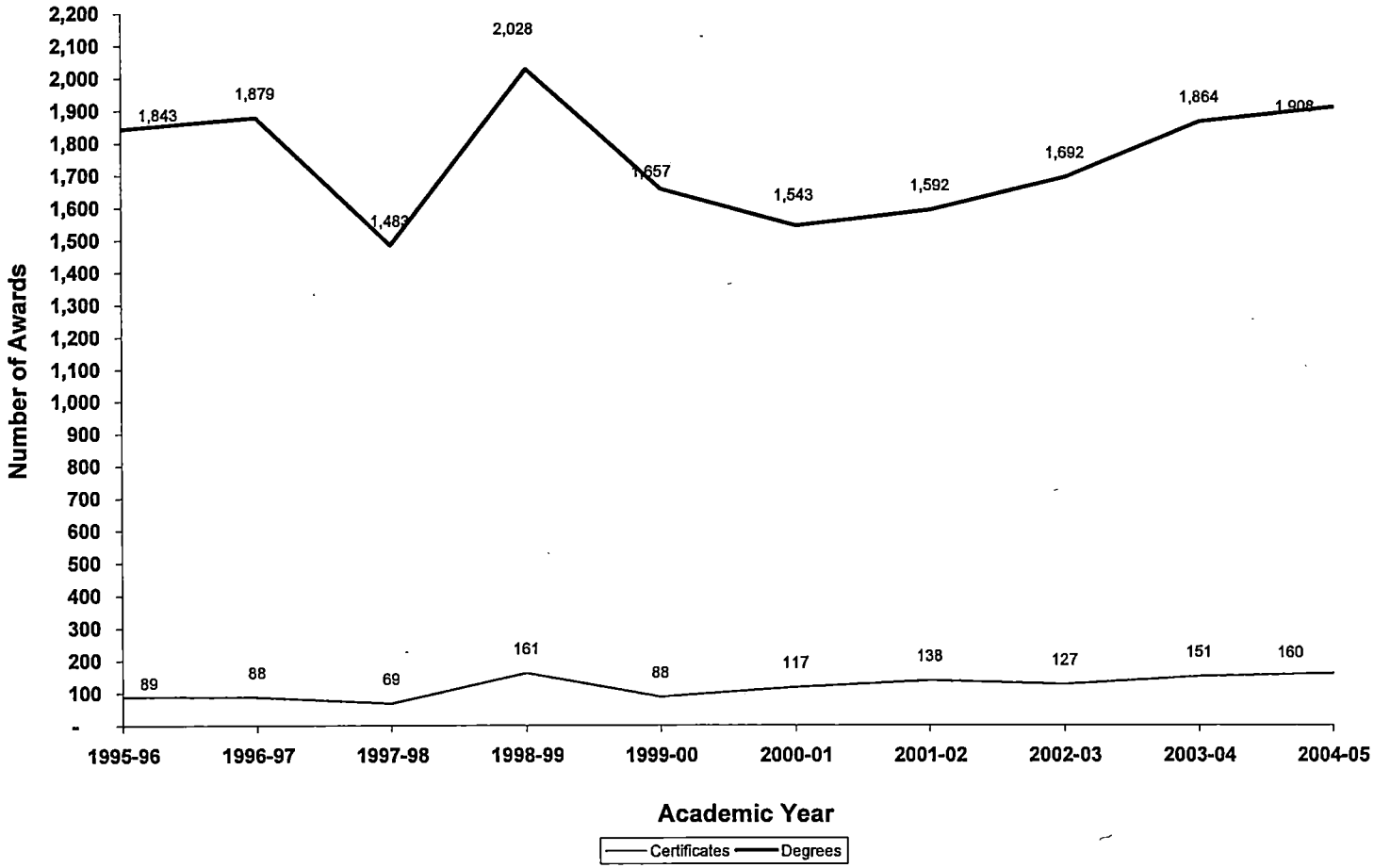
Source for this information was obtained from CCbenefits Inc. Community College Strategic Planner (CCSP).

Data presented in the following tables include:

- Base Year: Current number of jobs in 2004.
- Five Year: Number of projected jobs in 2009.
- Ten Year: Number of projected jobs in 2014.
- New Jobs: Projected number of new jobs between 2004 and 2014.
- Replacement Jobs: Projected number of replacement jobs between 2004 and 2014.
- % New Jobs: Percent of projected new jobs in 2014 using 2004 as the base year.
- % Replacement Jobs: Percent of projected replacement jobs in 2014 using 2004 as the base year.
- % New and Replacement Jobs: Percent of projected new and replacement jobs in 2014 using 2004 as the base year.
- Earnings: Average annual earnings within the SOC code in 2004.

Note: Percent change figures must be interpreted carefully since they are based on actual number of jobs. In some cases the actual number of jobs may be quite low, thereby giving a misleading picture if only the percentage was considered.

Oakland Community College
Associate Degrees and Certificates Awarded
College-Wide
1995-96 through 2004-05

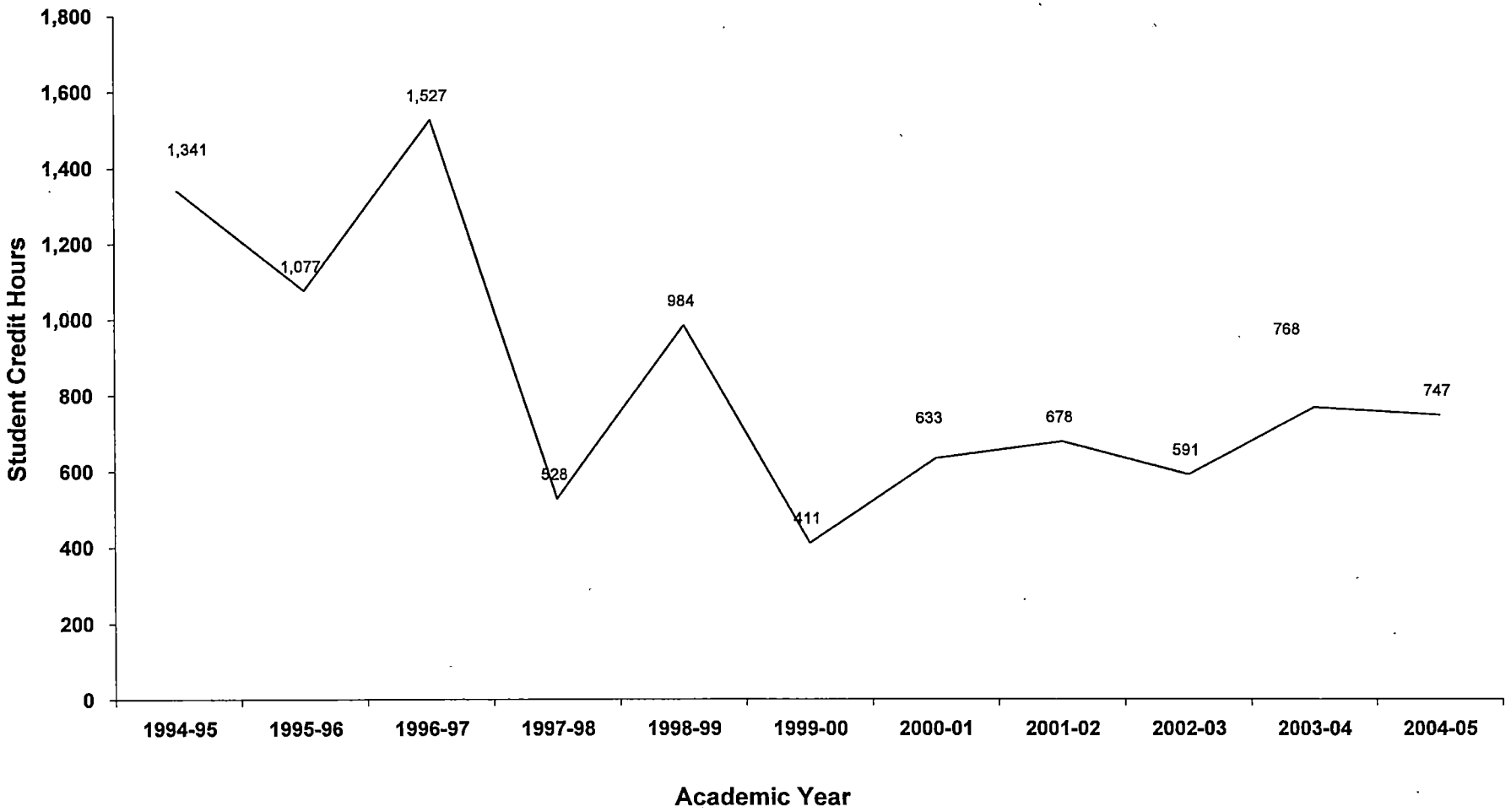


Source: OCC, Office of Institutional Research

1/19/2006

Oakland Community College
Ten-Year Trend in Student Credit Hours
Fire Fighter Technology
1994-95 through 2004-05

	1994-95 SCH	1995-96 SCH	1996-97 SCH	1997-98 SCH	1998-99 SCH	1999-00 SCH	2000-01 SCH	2001-02 SCH	2002-03 SCH	2003-04 SCH	2004-05 SCH	5-Year % Change	10-Year % Change
Fire Fighter Technology	1,341	1,077	1,527	528	984	411	633	678	591	768	747	81.8	-44.3
College Wide Totals	471,593	451,159	443,471	431,521	440,448	438,997	453,054	447,928	478,827	468,777	472,892	7.7	0.3



Source: OCC, Office of Institutional Research

1/19/2006

Fire Fighter Related Occupations (2004 through 2014)

SOC Detail Group

SOC Code	Name	Base Year	Five Year	Ten Year	New Jobs	Rplmnt Jobs	% New Jobs	% Rplmnt	% New & Rplmnt	Earnings
33-1021	First-line supervisors/managers of fire fighting and prevention workers	258	267	285	27	107	10.5%	41.5%	51.9%	$78,369
33-2011	Fire fighters	1,877	1,968	2,117	240	569	12.8%	30.3%	43.1%	$50,782
Totals:		2,135	2,235	2,402	267	676				

Source: OCC, Office of Assessment & Effectivenes (CCSP)

Program Assessment Plan
Fire Fighter Technology

Catalog Description

This program leads to an Associate in Applied Science Degree, gives the student an educational background for employment in the fire science area and aids persons already employed to obtain credentials for promotional opportunities. Students who satisfactorily complete the program will exhibit competency in building construction and fire safety, hydraulics, fire protection systems and equipment, handling of hazardous materials, arson investigation, fire safety and administration. Students with a valid current EMT license (which includes the necessary First Aid and Emergency Services/First Responder training), issued by the State of Michigan, will be granted PER 2540 Medical First Responder/First Responder equivalency following the existing vocational model. Students who have completed their State of Michigan Firefighter I and II Certification will be granted credit for FFT 1510 Introduction to Fire Prevention and FFT 1520 Fundamentals of Fire Prevention. Pre-service students must complete FFT 1510 and FFT 1520 prior to enrolling for higher course requirements.

Statement of Purpose

To update existing career professional's skills, and prepare students for careers in the Fire Service industry or enable their transfer to baccalaureate programs.

Learning Outcomes

Graduates will demonstrate qualitative reasoning and analytical skills for organizational problem solving and decision-making.

Benchmark 1

80% or more of the students will be able to triage the scene, prioritize objectives, and detail the appropriate management techniques for each scenario presented in mock emergency response scenarios.

Assessment Method 1

Written exam.

Assessment Date 1 5/1/2005 **Findings Sent to OAE Date 1** 6/1/2005

Benchmark 2

80% or more of the students will be able to triage the scene, prioritize objectives, and detail the appropriate management techniques for each scenario presented in mock emergency response scenarios.

Assessment Method 2

Practical, scenario based exam.

Assessment Date 2 5/1/2005 **Findings Sent to OAE Date 2** 6/1/2005

Learning Outcomes

Graduates will demonstrate the ability to synthesize and apply general concepts to a variety of emergency response situations.

Benchmark 1

80% or more of the students will be able to plan, prioritize objectives, and design the appropriate management system for each scenario presented to industry standards.

Assessment Method 1

Final Practical Exam (FFT 2540). Note: The program will maintain records of the FFT 2540 student's final exams and the instructor's comments. Upon the completion of two course offerings, the program coordinator and instructor will evaluate a random sampling of those exams.

Assessment Date 1 5/1/2005 **Findings Sent to OAE Date 1** 6/1/2005

Learning Outcomes

Graduates will be able to communicate effectively.

Benchmark 1

80% or more of the students will be able to evaluate the scene, manage and deploy emergency workers, call for additional backup, coordinate rescue operations, and report scenario details to instructor.

Assessment Method 1

Final Practical Exam (FFT 2520). Note: The program will keep the results of FFT 2520 student's final exams and the instructor's comments. Upon the completion of two course offerings, the program coordinator and the instructor will evaluate a random sampling of the exams.

Assessment Date 1 5/1/2005 **Findings Sent to OAE Date 1** 6/1/2005

Summary of Program Assessment Results
Fire Fighter Technology

Catalog Description
This program leads to an Associate in Applied Science Degree, gives the student an educational background for employment in the fire science area and aids persons already employed to obtain credentials for promotional opportunities. Students who satisfactorily complete the program will exhibit competency in building construction and fire safety, hydraulics, fire protection systems and equipment, handling of hazardous materials, arson investigation, fire safety and administration. Students with a valid current EMT license (which includes the necessary First Aid and Emergency Services/First Responder training), issued by the State of Michigan, will be granted PER 2540 Medical First Responder/First Responder equivalency following the existing vocational model. Students who have completed their State of Michigan Firefighter I and II Certification will be granted credit for FFT 1510 Introduction to Fire Prevention and FFT 1520 Fundamentals of Fire Prevention. Pre-service students must complete FFT 1510 and FFT 1520 prior to enrolling for higher course requirements.

Program Statement of Purpose
To update existing career professional's skills, and prepare students for careers in the Fire Service industryor enable their transfer to baccalaureate programs.

Learning Outcome
Graduates will be able to communicate effectively.

Benchmark 1
80% or more of the students will be able to evaluate the scene, manage and deploy emergency workers, call for additional backup, coordinate rescue operations, and report scenario details to instructor.

Assessment Method 1
Final Practical Exam (FFT 2520). Note: The program will keep the results of FFT 2520 student's final exams and the instructor's comments. Upon the completion of two course offerings, the program coordinator and the instructor will evaluate a random sampling of the exams.

Benchmark Scheduled To Be Assessed: 5/1/2004

Assessment Results Sent To Office of Assessment & Effectiveness: 6/1/2004

Findings 1
Assessment not implemented.

Learning Outcome
Graduates will demonstrate the ability to synthesize and apply general concepts to a variety of emergency response situations.

Benchmark 1
80% or more of the students will be able to plan, prioritize objectives, and design the appropriate management system for each scenario presented to industry standards.

Assessment Method 1
Final Practical Exam (FFT 2540). Note: The program will maintain records of the FFT 2540 student's final exams and the instructor's comments. Upon the completion of two course offerings, the program coordinator and instructor will evaluate a random sampling of those exams.

Benchmark Scheduled To Be Assessed: 5/1/2004

Assessment Results Sent To Office of Assessment & Effectiveness: 6/1/2004

Findings 1
Assessment not implemented.

Learning Outcome
Graduates will demonstrate qualitative reasoning and analytical skills for organizational problem solving and decision-making.

Benchmark 1
80% or more of the students will be able to triage the scene, prioritize objectives, and detail the appropriate management techniques for each scenario presented in mock emergency response scenarios.

Assessment Method 1
Written exam.

Benchmark Scheduled To Be Assessed: 5/1/2004

Assessment Results Sent To Office of Assessment & Effectiveness: 6/1/2004

Findings 1
Assessment not implemented.

Learning Outcome
Graduates will demonstrate qualitative reasoning and analytical skills for organizational problem solving and decision-making.

Benchmark 2
80% or more of the students will be able to triage the scene, prioritize objectives, and detail the appropriate management techniques for each scenario presented in mock emergency response scenarios.

Assessment Method 2
Practical, scenario based exam.

Benchmark Scheduled To Be Assessed: 5/1/2004

Assessment Results Sent To Office of Assessment & Effectiveness: 6/1/2004

Findings 2
Assessment not implemented.

COLLEGE
CURRICULUM
REVIEW
COMMITTEE

Curriculum Review Self-Study
Recommendations

Program/Discipline: FFT (Fire Fighter Technology) **Coordinator(s)**; Matt Sabol

Review Date: April 21, 2006 **Today's Date**: July 17, 2008

In an effort to provide meaningful feedback to the program coordinator and related faculty, specific recommendations resulting from your program/discipline Curriculum Review are as follows:

FFT (Fire Fighter Technology) - presented by Matt Sabol
Review Recommendations:

- Recommend that the Fire Fighting Academy look at Title 4 grant money since the academy is a feeder into the Fire Fighting Technology Program.

  We have discussed this issue with Wilma Porter, Director of Student Financial Resources. Wilma is checking into the viability of using Pell Grants, based on a clock-hour program, for the Fire Academy.

- Recommend that mandatory items are on syllabi.

  All mandatory items have been changed in the syllabi.

- There is a potential for a new curriculum in emergency management, and if supported there will be a need for a full-time faculty member to coordinate this program and Fire Fighting Technology. This is recommended by the CRC.

  Since the review there have been four Homeland Security classes approved with two more pending. A full time faculty position is already being pursued. The campus vacancy committee has made it a priority 2 on the vacancy list this year.

- Distance learning would assist students, due to odd work hours, in completing necessary course work (FESHE). Delta College offers on-line courses that could eventually effect Fire Fighter Technology enrollment if this component is not offered. A concern is that only part-time faculty teaches this program.

  Just recently discovered that OCC adjunct faculty is now approved to teach online courses. I made contact with one of the adjunct faculty in FFT that is more than willing to learn, develop, and teach online classes in the FFT discipline. We're

planning to offer the online development for Fall 2008 and hope to add an on-line section of Introduction to Firefighting in Winter 2009.

- Recommend making use of Perkins dollars for equipment purchase.

  Four pieces of equipment have already been bought through Perkins since the last review; they are the X-Chamber, Thermal Imaging Camera, Thru-the -Lock, and 15 sets of self contained breathing apparatus.

- Consider looking at options due to increase of hands-on component. Create lab section for hands-on component for B class size instead of A class size.

  Right now we are waiting on a full time instructor to redesign the classes. This will be accomplished sometime in 2009.

- Recommend that articulation agreements be brought current.

  Our articulation agreement with Sienna Hts. is current and up to date. We are in the process of exploring the possibility of an agreement with Madonna University since they offer a Bachelor degree in fire science.

Fire Fighting Technology Review on April 21, 2006

- Recommend that the Fire Fighting Academy look at Title 4 grant money since the academy is a feeder into Fire Fighting Technology.
- Recommend that mandatory items are on syllabi
- There is a potential for a new curriculum in emergency management and if supported there will be a need for a Full Time faculty member to coordinate this program and Fire Fighting Technology which CRC recommends.
- Distance learning would assist students due to odd work hours in completing necessary course work (FESHE). Delta College offering on-line courses which could eventually effect Fire Fighting Technology enrollment if this component not offered. Concern is only Part Time faculty teach this program.
- Recommend utilizing Perkins dollars for equipment purchase.
- Consider looking at options due to increase of hands on component (create lab section for hands on component/B class size instead of A).
- Recommend that articulation agreements be brought current.