# Montgomery County Community College FSC 100 Introduction to Fire Science 3-3-0

# COURSE DESCRIPTION:

This course will provide an introduction to the history and philosophy of fire protection; a review of fire losses; a discussion of the relationship between fire prevention and fire control and extinguishment; a career orientation; current legislative developments; a review of current and future fire protection.

# **REQUISITES:**

Previous Course Requirements
None

Concurrent Course Requirements None

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
Describe and discuss     the history and     philosophy of the     modern day fire service.	Assigned Readings Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study
2. Analyze the basic components of fire as a chemical reaction, the major phases of fire, and examine the main factors that influence fire spread and fire behavior.	Assigned Readings Lectures Discussions Case Study Analysis AV/Multimedia Materials Internet Field Trips Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study

LE	ARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
3.	Differentiate between	Assigned Readings	Multiple-Choice Exam
	fire service training and	Lectures	Graded Essay
	education; fire	Discussions	Graded Essay Exam
	protection certificate	Case Study Analysis	Assignments
	programs and a fire	AV/Multimedia Materials	Graded Research Project
	service degree	Internet Field Trips	Individual or Group
	program; and explain	Field Trips	Presentation
	the value of education	Essay Assignments	Graded Class Discussion
	in the fire service.	Directed Research	Graded Case Study
		Quizzes and Exams	
4.	List and describe the	Assigned Readings	Multiple-Choice Exam
	major organizations that	Lectures	Graded Essay
	provide emergency	Discussions	Graded Essay Exam
	response services and	Case Study Analysis	Assignments
	illustrate how they	AV/Multimedia Materials	Graded Research Project
	interrelate.	Internet Field Trips	Individual or Group
		Field Trips	Presentation
		Essay Assignments	Graded Class Discussion
		Directed Research	Graded Case Study
-	Identify fire protection	Quizzes and Exams Assigned Readings	Multiple Chaice Even
J.	Identify fire protection and emergency	Lectures	Multiple-Choice Exam Graded Essay
	services careers in both	Discussions	Graded Essay Exam
	the public and the	Case Study Analysis	Assignments
	private sectors.	AV/Multimedia Materials	Graded Research Project
	private decision.	Internet Field Trips	Individual or Group
		Field Trips	Presentation
		Essay Assignments	Graded Class Discussion
		Directed Research	Graded Case Study
		Quizzes and Exams	,
6.	Synthesize the role of	Assigned Readings	Multiple-Choice Exam
	national, state, and local	Lectures	Graded Essay
	support organizations in	Discussions	Graded Essay Exam
	fire protection and	Case Study Analysis	Assignments
	emergency services.	AV/Multimedia Materials	Graded Research Project
		Internet Field Trips	Individual or Group
		Field Trips	Presentation
		Essay Assignments	Graded Class Discussion
		Directed Research	Graded Case Study
		Quizzes and Exams	

LEARN	IING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
7. Disc	cuss and describe	Assigned Readings	Multiple-Choice Exam
the	scope, purpose, and	Lectures	Graded Essay
orga	anizational structure	Discussions	Graded Essay Exam
of fir	re and emergency	Case Study Analysis	Assignments
serv	vices.	AV/Multimedia Materials	Graded Research Project
		Internet Field Trips	Individual or Group
		Field Trips	Presentation
		Essay Assignments	Graded Class Discussion
		Directed Research	Graded Case Study
		Quizzes and Exams	
8. Des	scribe the common	Assigned Readings	Multiple-Choice Exam
type	es of fire and	Lectures	Graded Essay
	ergency services	Discussions	Graded Essay Exam
facil	lities, equipment,	Case Study Analysis	Assignments
and	apparatus.	AV/Multimedia Materials	Graded Research Project
		Internet Field Trips	Individual or Group
		Field Trips	Presentation
		Essay Assignments	Graded Class Discussion
		Directed Research	Graded Case Study
		Quizzes and Exams	
	npare and contrast	Assigned Readings	Multiple-Choice Exam
	ctive management	Lectures	Graded Essay
	cepts for various	Discussions	Graded Essay Exam
eme	ergency situations.	Case Study Analysis	Assignments
		AV/Multimedia Materials	Graded Research Project
		Internet Field Trips	Individual or Group
		Field Trips	Presentation
		Essay Assignments	Graded Class Discussion
		Directed Research	Graded Case Study
10 145	atifu and avalain the	Quizzes and Exams	Multiple Chaics Even
	ntify and explain the	Assigned Readings	Multiple-Choice Exam
	nponents of fire	Lectures	Graded Essay
	vention including	Discussions Coop Study Applyois	Graded Essay Exam
	e enforcement,	Case Study Analysis	Assignments Creded Research Project
	lic information, and	AV/Multimedia Materials	Graded Research Project
	lic and private fire	Internet Field Trips	Individual or Group
prot	ection systems.	Field Trips	Presentation Creded Class Discussion
		Essay Assignments	Graded Class Discussion
		Directed Research	Graded Case Study
	analysian of agab sam	Quizzes and Exams	

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that 70% of students will meet or exceed outcome criteria.

### **SEQUENCE OF TOPICS:**

- 1. Careers in the Fire Protection & Emergency Services
- 2. History of the Fire Service
- 3. Fire Protection Services
- 4. Apparatus and Equipment
- 5. Management in the Fire Service
- 6. Fire Extinguishing Agents
- 7. Strategy and Tactics
- 8. Private Fire Protection
- 9. The Origin and Cause of Fires
- 10. Municipal Fire Defense
- 11. Fire Protection Systems
- 12. Hazardous Materials
- 13. Fire Code Management
- 14. Building Construction and Passive Fire Protection Systems

#### LEARNING MATERIALS:

Klinoff, Robert. (2011). Introduction to Fire Protection (4th ed.). Cengage.

Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

#### COURSE APPROVAL:

Whofevs

Prepared by: Don Nypower Date: 6/1995 Revised by: Benn Prybutok Date: 2/22/2009 VPAA/Provost Compliance Verification: Dr. John C. Flynn, Jr. Date: 9/11/2009

Revised by: Benn Prybutok Date: 2/2013

VPAA/Provost or designee Compliance Verification:

Victoria L. Bastecki-Perez, Ed.D. Date: 2/25/2013

Revised by: Jayden Sampson Date: 12/16/2017 VPAA/Provost or designee Compliance Verification: Date: 12/18/2017

This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.