

Montgomery County Community College
FSC 105
Fire Prevention and Code Enforcement
3-3-0

COURSE DESCRIPTION:

The topics covered include: federal state and local building codes and ordinances; national fire protection standards; National Electrical Code; Life Safety Codes; how codes affect construction and fire fighting; and the role of local fire departments and state officials.

REQUISITES:*Previous Course Requirements*

- FSC 100 - Introduction to Fire Science

Concurrent Course Requirements

None

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Define the national fire problem and main issues relating thereto.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations ("Skull Session")
2. Identify the needs, responsibilities, and importance of fire prevention as part of an overall mix of fire protection.	Assigned Readings Lectures Discussions Case Study Analysis Application of Materials to Realistic Situations 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 Graded Application of Materials to Realistic Situations ("Skull Session")

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
3. Describe the needs, responsibilities and importance of fire prevention organizations.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
4. Identify minimum professional qualifications at the state and national levels for Fire Inspector, Fire Investigator, and Public Educator.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
5. Define the elements of a plan review program.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
6. Identify relevant laws, regulations, rules and codes, and explain their purposes and uses.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
7. Discuss the importance of having training programs for fire prevention.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
8. Design a media program directed toward developing public awareness and education aimed at fire prevention.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
9. Discuss and design programs directed toward primary and secondary education aimed at fire prevention awareness.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
10. Describe the role of model codes and explain the NFPA occupancy classification system of the Life Safety Code.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
11. Describe the NFPA Life Safety Code and its indexing structure.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
12. Explain the code development process at the local, state and national levels.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
13. Explain in detail the ten (10) fundamental concepts of life safety.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
14. Calculate occupant loads, exit capacities and travel distances for individual occupancies.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
15. Explain the features of fire protection and building services as found in the Life Safety Code.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
16. Describe the role and responsibilities of the state and/or local Fire Marshall's Office.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)
17. Calculate the area and height requirements of building using the BOCA Code.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
18. Describe the impact of ADA on Life Safety.	Assigned Readings Lectures Discussions Case Study Analysis Application of Lecture Materials to Realistic Situations 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 Graded Application of Lecture Materials to Realistic Situations (“Skull Session”)

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. Fire Prevention organizations
2. Organization of a fire prevention bureau
3. Building codes and fire prevention
4. Fire codes and fire prevention
5. The Code Making Process
6. The Life Safety Code
7. Hazards
8. Occupancies
9. Fire Protection and Services
10. Inspections
11. Inspection Procedures
12. PA & Local Fire Regulations
13. BOCA Building Codes & BOCA Fire Code
14. The Plans Review Process

LEARNING MATERIALS:

IFSTA. (2009). *Fire Inspection and Code Enforcement* (7th ed.). IFSTA.

Textbooks are selected each semester at the discretion of the division.

- *Life Safety Codes*
- *BOCA National Building Code*
- *BOCA Fire Prevention Code*
- *National Fire Codes*
- *OSHA Regulations*

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:

Prepared by: Angela M. Ambers-Henderson	Date: 9/1998
Revised by: Benn Prybutok	Date: 2/2/2009
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.