Emergency Management & Communication Technology
Mississippi Curriculum Framework

Program CIP 43.9999 Security and Protective Services, Other
September 2019

Published by:
Mississippi Community College Board
Division of Workforce, Career, and Technical Education
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The Office of Curriculum and Instruction (OCI) was founded in 2013 under the Division of Workforce, Career, and Technical Education at the Mississippi Community College Board (MCCB). The office is funded through a partnership with The Mississippi Department of Education (MDE), who serves as Mississippi's fiscal agent for state and federal Career and Technical Education (CTE) Funds. The OCI is tasked with developing statewide CTE curriculum, programming, and professional development designed to meet the local and statewide economic demand.

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RESEARCH ABSTRACT

The curriculum framework in this document reflect changes in the workplace and a number of other factors that impact local vocational–technical programs. Federal and state legislation calls for articulation between high school and community college programs, integration of academic and vocational skills, and the development of sequential courses of study that provide students with the optimum educational path for achieving successful employment. National skills standards, developed by industry groups and sponsored by the U.S. Department of Education and Labor, provide vocational educators with the expectations of employers across the United States. All of these factors are reflected in the framework found in this document.

The last revision of this curriculum took place in 2012. In the fall of 2019, the Office of Curriculum and Instruction (OCI) met with different industry/program visits. An industry questionnaire was used to gather feedback concerning the trends and needs, both current and future, of the field. Industry members stated the curriculum was strong, and it fulfills the needs of the workforce. Program faculty and industry members were consulted regarding industry workforce needs and trends.

REVISION HISTORY

2012- Research and Curriculum Unit, Mississippi State University
2019- Office of Curriculum & Instruction, Mississippi Community College Board

INDUSTRY JOB PROJECTION DATA

The field of emergency management communications technology is growing steadily. This field provides not only opportunities in direct first-line supervisors/managers work but also room for multiple career fields. There is an increase in occupational demand at the state level. Median annual income for this career field is $35,925.56 at the state and regional level. A summary of occupational data from National Strategic Planning and Analysis Research Center (nSPARC) is displayed below:

Table 1: Education Level

Program Occupations	Education Level
First-Line Supervisors/Managers, Protective Service Workers, All Other	Work Experience in Related Field
Transit and Railroad Police	Long-Term on-the-job training
Protective Service Workers, All Other	Work Experience in Related Field

Table 2: Occupational Overview

	Region	State	United States
2016 Occupational Jobs	2,092	2,092	208,343
2026 Occupational Jobs	2,105	2,105	212,640
Total Change	13	13	4,297
Total % Change	0.62%	0.62%	2.06%
2016 Median Hourly Earnings	$17.27	$17.27	$19.51
2016 Median Annual Earnings	$35,925.56	$35,925.56	$40,578.55
Annual Openings	1	1	430

Table 3: Occupational Breakdown

Description	2016 Jobs	2026 Jobs	Annual Openings	2016 Hourly Earnings	2016 Annual Earnings 2,080 Work Hours
First-Line Supervisors/Managers, Protective Service Workers, All Other	578	583	1	$17.75	$36,920.00
Transit and Railroad Police	23	23	0	$32.03	$66,622.40
Protective Service Workers, All Other	1,491	1,499	1	$13.89	$28,891.20

Table 4: Occupational Change

Description	Regional Change	Regional % Change	State % Change	National % Change
First-Line Supervisors/Managers, Protective Service Workers, All Other	5	0.87%	0.87%	1.36%
Transit and Railroad Police	0	0.00%	0.00%	0.28%
Protective Service Workers, All Other	8	0.54%	0.54%	2.47%

ARTICULATION

No articulated credit will be offered upon implementation of this curriculum. Local agreements and dual credit partnerships are encouraged.

TECHNICAL SKILLS ASSESSMENT

Colleges should report the following for students who complete the program with a career certificate, technical certificate, or an Associate of Applied Science Degrees for technical skills attainment.

CIP Code	**Program of Study**
43.9999	Emergency Management & Communication Technology
Level	**Standard Assessment**
Career	MS-CPAS-2 Emergency Management & Communication Technology: Year 1
Technical/AAS	MS-CPAS-2 Emergency Management & Communication Technology: Year 2

ONLINE AND BLENDED LEARNING OPPORTUNITIES

Course content includes lecture and laboratory semester credit hours. Faculty members are encouraged to present lecture related content to students in an online or blended learning environment. Training related to online and blended learning will be available to faculty members through the MS Community College Board.

PROGRAM DESCRIPTION

Emergency Management & Communications Technology is an instructional program that prepares individuals to provide skill and training in the emergency management area and in public safety communications. Individuals completing the ECT courses will be an integral part of local, state, and national response teams providing skills and knowledge in a variety of emergency situations. Emergency Management & Communications Technology can complete a one year Technical Certificate and a two year Associate of Applied Science degree. Courses taken as part of the one year Technical Certificate can be transferred to the AAS degree program. Students who complete the program are eligible to take FEMA certifications (100, 200, 700, and 800).

The certifications are based on professional qualification standards referenced by the U.S. Department of Homeland Security, FEMA Emergency Management Institute.

For more information consult http://training.fema.gov/EMICourses/.

SUGGESTED COURSE SEQUENCE

Emergency Management & Communications Technology Career Pathway

			SCH Breakdown			Credit Hour Breakdown		Certification Information
Course Number	Course Name	Semester Credit Hours	Lec-ture	Lab	Total Credit Hours	Lec-ture	Lab	Certification Name
ECT 1113	Principles of Emergency Management	3						
ECT 1123	Fire Service Operations	3						
ECT 1213	Law Enforcement Operations	3						
	Electives approved by instructor	6						
	TOTAL	**15**						

Career Certificate Required Courses Emergency Management & Communications Technology

			SCH Breakdown			Credit Hour Breakdown		Certification Information
Course Number	Course Name	Semester Credit Hours	Lecture	Lab	Total Credit Hours	Lect ure	Lab	Certification Name
ECT 1113	Principles of Emergency Management	3						
ECT 1123	Fire Service Operations	3						
ECT 1213	Law Enforcement Operations	3						
ECT 1223	Principles of Public Safety Communications	3						
ECT 2313	Hazardous Materials	3						
ECT 2323	Incident Management Systems	3						
ECT 2333	Emergency Planning	3						
ECT 2413	Emergency Personnel Supervision	3						
ECT 2423	Disaster Response & Recovery	3						
ECT 2433	Public Info. & Awareness	3						
	TOTAL	**30**						

Technical Certificate Required Courses Emergency Management & Communications Technology

			SCH Breakdown			Credit Hour Breakdown		Certification Information
Course Number	Course Name	Semester Credit Hours	Lecture	Lab	Total Credit Hours	Lecture	Lab	Certification Name
ECT 2513	Financial Management	3						
ECT 2613	Hazardous Weather Operations	3						
ECT 2833	Principles of Transportation Security	3						
	Electives approved by instructor	6						
	TOTAL	**15**						

Approved Program Electives

			SCH Breakdown			Credit Hour Breakdown		Certification Information
Course Number	Course Name	Semester Credit Hours	Lecture	Lab	Total Credit Hours	Lecture	Lab	Certification Name
	All other instructor approved electives							
These electives are recommended to be taken in the technical certificate along with the required courses to fulfill the emergency management specialty area.								
ECT 1613	Mass Casualty Incident Management	3						
ECT 2623	Special Problems in Emergency Management	3						
ECT 2613	Hazardous Weather Operations	3						
ECT 2713 or EMS 1117	Emergency Management Technical Practicum or Emergency Medical Technician	3 or 7						
These electives are recommended to be taken in the technical certificate along with the required courses to fulfill the homeland security specialty area.								
ECT 1813	Dynamics of Homeland Security	3						
ECT 2813	Response to Terrorism	3						
ECT 2833	Principles of Transportation Security	3						

Course Listing Emergency Management & Communications Technology

			SCH Breakdown			Program Certifications
Course Number	Course Name	Semester Credit Hours	Lecture	Lab	Total Contact Hours	
ECT 1113	Principles of Emergency Management	3				
ECT 1123	Fire Service Operations	3				
ECT 1213	Law Enforcement Operations	3				
ECT 1223	Principles of Public Safety Communications	3				
ECT 1613	Mass Casualty Incident Management	3				
ECT 1813	Dynamics of Homeland Security	3				
ECT 2313	Hazardous Materials	3				
ECT 2323	Incident Management Systems	3				
ECT 2333	Emergency Planning	3				
ECT 2413	Emergency Personnel Supervision	3				
ECT 2423	Disaster Response & Recovery	3				
ECT 2513	Financial Management	3				
ECT 2623	Special Problems in Emergency Management	3				
ECT 2433	Public Info. & Awareness	3				
ECT 2613	Hazardous Weather Operations	3				
ECT 2713 or EMS 1117	Emergency Management Technical Practicum or Emergency Medical Technician	3 or 7				
ECT 2813	Response to Terrorism	3				
ECT 2833	Principles of Transportation Security	3				

General Education Core Courses

To receive the Associate of Applied Science degree, a student must complete all of the required coursework found in the Career Certificate option, Technical certificate option, and a minimum of 15 semester hours of General Education core. The courses in the General Education Core may be spaced out over the entire length of the program so that students complete some academic and Career Technical courses each semester or provided primarily within the last semester. Each community college will specify the actual courses that are required to meet the General Education Core Requirements for the Associate of Applied Science degree at their college. The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) Section 9 Standard 3 of the *Principles of Accreditation: Foundations for Quality Enhancement*[1] describes the general education core.

Section 9 Standard 3:

3. The institution requires the successful completion of a general education component at the undergraduate level that

   a) is based on a coherent rationale.

   b) is a substantial component of each undergraduate degree program. For degree completion in associate programs, the component constitutes a minimum of 15 semester hours of the equivalent; for baccalaureate programs, a minimum of 30 semester hours or the equivalent.

   c) ensures breadth of knowledge. These credit hours include at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural science/mathematics. These courses do not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession.

General Education Courses

			SCH Breakdown			Contact Hour Breakdown		Certification Information
Course Number	Course Name	Semester Credit Hours	Lecture	Lab	Total Contact Hours	Lecture	Lab	Certification Name
	Humanities/Fine Arts	3						
	Social/Behavioral Sciences	3						
	Math/Science	3						
	Academic electives	6						
	TOTAL	**15**						

[1] Southern Association of Colleges and Schools Commission on Colleges. (2017). *The Principles of Accreditation: Foundations for Quality Enhancement.* Retrieved from http://www.sacscoc.org/2017ProposedPrinc/Proposed%20Principles%20Adopted%20by%20BOT.pdf

COURSE DESCRIPTIONS

Course Number and Name: **ECT 1113** **Principles of Emergency Management**

Description: This course provides an overview of the characteristics, functions, and resources of an integrated system and how various emergency management services work together to maximize their capabilities. Emphasis will be placed on how this system is applied to all hazards for all government levels, and across the four phases of a disaster.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Describe the components of the history and philosophy of the modern day field of emergency management.
2. Describe the differences between emergency management training and education; certificate programs and degree programs; and explain the value of education in emergency management.
3. Identify and describe the major organizations that provide emergency preparedness, mitigation, response, and recovery services and illustrate how they interrelate.
4. Identify various emergency management careers available in the public and private sector.
5. Describe the role of national, state, and local support organizations in emergency management.
6. Identify and describe the scope, purpose, and organizational structure common to emergency management.
7. Describe the common types of emergency management facilities, equipment, and communication systems.
8. Compare and contrast effective management concepts for various emergency situations.
9. Explain the importance of preparedness, public information, and evacuation to emergency managers.
10. Identify a specific problem related to an emergency management concept and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 1123** **Fire Service Operations**

Description: An orientation to the fire service, this course explores department structure and organization, operations and responsibility, and the history of the fire service. Also included are changes that impact how traditional fire department services are currently delivered.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Describe the components of the history and philosophy of the modern day fire service.
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.
3. Describe the differences between fire service training and education; fire protection certificate program and a fire service degree program; and explain the value of education in the fire service.
4. Identify and describe the major organizations that provide emergency response service and illustrate how they interrelate.
5. Identify fire protection and emergency-service careers in both the public and in the private sector.
6. Describe the role of national, state, and local support organizations in fire protection and emergency services.
7. Identify and describe the scope, purpose, and organizational structure common to the fire and emergency services.
8. Describe the common types of fire and emergency services facilities, equipment, and apparatus.
9. Compare and contrast effective management concepts for various emergency situations.
10. Identify and explain the components of fire prevention including code enforcement, public information, and public and private fire protection systems.
11. Identify a specific problem related to an emergency management concept involving fire and rescue services and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 1213 Law Enforcement Operations**

Description: Line activities of law enforcement organizations are discussed with emphasis on organization and management. This course provides a guide to the responsibilities assigned to patrol, traffic, investigation, and other specialized police units.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Describe the components of the history and philosophy of modern day law enforcement agencies.
2. Explain the basic components of a law enforcement agency including patrol, investigations, support services, and special operations.
3. Describe the differences between law enforcement training and education; officer certificate program and a criminal justice degree program; and explain the value of education in law enforcement.
4. Identify and describe the major organizations that support law enforcement functions and illustrate how they interrelate.
5. Identify and describe both sworn and non-sworn careers in law enforcement.
6. Describe the role of national, state, and local support organizations in law enforcement.
7. Identify and describe the scope, purpose, and organizational structure common to municipal, county, and state law enforcement agencies.
8. Describe the common types of law enforcement and emergency services facilities, equipment, and vehicles.
9. Compare and contrast effective management concepts used to direct law enforcement resources during emergency and non-emergency situations.
10. Identify and explain the components of crime prevention including public intervention, and public and private alarm systems.
11. Identify a specific problem related to an emergency management concept involving law enforcement services and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 1223** **Principles of Public Safety Communications**

Description: This course is a study of the systems used to facilitate emergency communications between the public, field units, and dispatch centers. Information is centered on the methods used by telecommunicators to rapidly process, react to and broadcast critical information.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Develop an understanding of the training, education, and skills needed to be an effective telecommunicator.
2. Explain the history of public safety communications in America including the availability and use of 911.
3. Develop an understanding of the systems used to provide public safety communications.
4. Describe current trends that are changing the way public safety communication systems function.
5. Develop an understanding of the interaction between telecommunicators, field units, and the public.
6. Explain the benefits of new communication technologies including the use of computer aided dispatching and location determination software.
7. Develop an understanding of the information resources needed to maintain effective public safety communication services.
8. Describe the common types of facility enhancements and equipment used to secure public safety communication systems and telecommunicators.
9. Explain the use of back up systems to maintain the public safety communication network (phones and radios) when traditional technology fails.
10. Identify a specific problem related to an emergency management concept involving public safety communication services and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 1613** **Mass Casualty Incident Management**

Description: During a disaster, few things are more taxing on a community's response resources than multiple casualty incidents. This course uses components of the Incident Command System to coordinate the efforts of triage, treatment, and transport of the sick and injured. Additional focus is placed on identifying key incident factors that impact the decision-making process.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Define the criteria used by emergency responders to declare a mass casualty incident or situation.
2. Explain the concept of rapid triage and the role it has in managing a mass casualty incident.
3. Develop an understanding of the systems used to organize and command emergency medical resources.
4. Describe the various methods used to identify multiple patients and track their movement through the medical care system.
5. Explain the importance of effective mortuary services during a mass casualty incident.
6. Develop an understanding of the tactical considerations that must be considered managing a multi-casualty incident.
7. Explain the concept of a medical surge and the interrelation that occurs between responders and hospital care providers during a mass casualty incident.
8. Describe the concept of a state-wide trauma system and how it can impact the distribution of mass casualty patients.
9. Develop an understanding of the equipment and supplies available to manage a multi-casualty Incident.
10. Identify a specific problem related to an emergency management concept involving mass casualty incident management and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 1813** **Dynamics of Homeland Security**

Description: The primary intent of this course involves information gathering, including the analysis and assessment of local threats and response capabilities. Students will develop procedures for preparing and responding to terrorist attacks. In addition, the practices for restoring and maintaining critical government operations are discussed in this course.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Identify and analyze various threat avenues, organizations, and methods that pose a hazard to local and national security.
2. Identify and analyze the agencies and systems in place to meet local and national homeland security missions.
3. Explain the role that law enforcement plays in administering an effective homeland security program.
4. Describe the balance that government homeland security systems must achieve between meeting the need for public protection and maintaining constitutional rights.
5. Explain the various funding mechanisms used to support homeland security initiatives in the United States.
6. Describe the role the "Patriot Act" has played in the government's attempt to enhance national homeland security.
7. Identify a specific problem related to an emergency management concept involving homeland security and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2313 Hazardous Materials**

Description: Identification and recognition of hazardous materials are stressed in this class. Various types and classes of hazardous materials are discussed as well as various methods of transportation and storage.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Understand the laws regulating training requirements for the hazardous materials responder.
2. Analyze a hazardous materials incident to determine the products involved and the magnitude of the problem.
3. Interpret hazard and response information from printed resources, technical resources, computer databases, and monitoring equipment.
4. Identify the steps in an analysis process for identifying unknown materials and describe the steps for determining emergency response objectives.
5. Identify how occupancy, container, and location can assist in determining the presence of hazardous materials.
6. Identify the various types of chemical protection devices and determine the appropriate personal protective equipment needed for a specific response action.
7. Identify the steps for determining the extent of physical, health, and safety hazards within the endangered area of a hazardous materials release.
8. Identify the various types and limitations of chemical detection and monitoring equipment.
9. Describe how differences in chemical and physical properties can affect a hazardous materials incident.
10. Explain the importance of a local emergency response plan and standard operating guidelines to responders during a hazardous material incident.
11. Describe the functions and responsibilities of the various positions within the incident command system for a hazardous materials incident.
12. Identify a specific problem related to an emergency management concept involving hazardous materials and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2323 Incident Management Systems**

Description: This course is a study of incident management systems used for handling situations from relatively small incidents to the largest disasters. A variety of methods are discussed with emphasis placed on the National Incident Management System.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Identify and define the main functions within the ICS system and how they interrelate during an incident.

2. Explain the relationship between effective ICS and the used of incident objectives (life safety, incident stabilization, and property conservation).

3. Describe how the fire service uses ICS to maintain safe and effective communication channels during emergency and non-emergency incidents.

4. Explain the ICS concept known as “span of control” and describe how it can influence personnel accountability.

5. Explain the ICS concept known as “unified command” and describe how it can be adapted to work in multi-jurisdictional and multi-agency situations.

6. Describe the process of sectoring and how it provides a uniform method of geographical identification for specific points within an incident area.

7. Explain how ICS can be modified to deal with immediate threats to response personnel and other on-scene emergency procedures.

8. Given case studies of large-scale disasters, identify the short-range and long-range planning methods used to forecast logistical needs.

9. Describe the process of staging and how to effectively manage and deploy incoming resources.

10. Explain the importance of responder rehabilitation and the ICS procedures for providing on-scene rehabilitation services.

11. Explain the use of resource typing and common terminology within ICS to improve interoperability and communications.

12. Describe the process of demobilization and how ICS is used to effectively reduce the number of on-scene resources.

13. Identify a specific problem related to the effective management of incident resources and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2333** **Emergency Planning**

Description: The development of emergency operation plans and the process used to update existing plans that conform to current federal guidelines is covered in this course. Additional focus is laced on the interaction between public safety personnel that occurs during the planning process.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Explain how a fire and emergency service organization articulates a vision and defines its mission.
2. Describe the components of project planning and identify the steps of the planning cycle.
3. Describe how a cultural assessment works to determine potential strategic issues and the direction of an organization.
4. Assess the organizational relationship between budgeting, operational plans, and strategic plans.
5. Describe the purpose, function, and current and future security concerns of working document publication, storage, and integrity.
6. Assess the impact that training and education can have on the organization's ability to carry out its stated mission.
7. Describe common methods used to collect local response data and how such information can be analyzed to improve organizational capabilities.
8. Demonstrate the ability to write fire related research objectives.
9. Research, evaluate and discuss various sources from which external, fire-related research information is available.
10. Identify a specific problem related to planning for emergency management and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2413 Emergency Personnel Supervision**

Description: Focusing on supervising and managing personnel involved with emergency management, this course provides students with information on developing effective administrative techniques. Attention is given to exploring the role of the supervisor, dealing with problem situations, and issues related to leadership.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Identify and explain contemporary management issues that occur due to variations in fire department demographics.
2. Explain the collective rules, procedures, laws, and policies that impact personnel management issues.
3. Describe the most common personnel management issues that affect the recruitment of emergency service personnel.
4. Compare and contrast the traits of effective versus ineffective supervision and management styles.
5. Discuss the components and styles of leadership.
6. Explain the principles associated with organizational development and the leadership structures commonly seen throughout the fire service.
7. Describe the managerial relationships that exist between financial, human, facilities, equipment, and information resources.
8. Explain the importance of public access to government and fire department operations.
9. Describe the key elements of successful communication to meet both internal and external customer needs.
10. Explain the need for effective personnel evaluation procedures and how such data can be applied towards organizational improvement.
11. Identify a specific problem related to the supervision of emergency service personnel and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2423** **Disaster Response and Recovery**

Description: This course discusses the role emergency managers have in responding to situations and the operations necessary to begin recovery efforts. Emphasis is placed on responsibilities assumed by local, state, and federal government agencies as well as the associated coordination requirements.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Define the phases of a disaster and explain the common tasks associated with preparation, mitigation, response, and recovery.
2. Describe the fire department's role in responding to a community disaster and explain the concepts of mutual aid and automatic aid.
3. Differentiate the availability of disaster resources from local, state, Federal, and private agencies or organizations.
4. Identify communications issues that commonly occur among the various levels of government that respond in times of disaster.
5. Explain how public communication systems can fail during times of disaster and any alternate/redundant methods used to limit the impact of such failures.
6. Explain the stages of the damage assessment process and the reporting requirements following a local disaster.
7. Describe the various Federal, state, and local assistance programs available to disaster victims during the recovery phase.
8. Evaluate the roles and responsibilities of key state and Federal personnel in responding to a declared major disaster.
9. Determine some typical responses that may be anticipated in disaster survivors and responders.
10. Explain the importance of crisis counseling and stress management programs during disaster response and recovery operations.
11. Describe the various types of public sheltering systems and their common limitations during times of disaster.
12. Identify a specific problem related to disaster management and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2513** **Financial Management**

Description: Budgeting and financial management are the primary concerns of this course. Various methods of budgeting are discussed as well as budgetary tracking methods and evaluation procedures. The application of these methods is demonstrated at different levels of personnel responsibility.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Describe the typical sources of income used to fund fire department operations.
2. Explain the purpose and need for an effective budgeting process.
3. Identify and define the types of budgets commonly used to guide fire department financial management.
4. Describe the use of regular budget analysis and its potential influence on setting fire department spending priorities.
5. Explain the impact personnel costs can have on the overall fire department budget.
6. Describe how funds can be divided to accommodate different training needs and resources.
7. Explain the typical interaction between the fire department and other governmental departments as it relates to the budgeting process.
8. Identify the laws and regulations common to purchasing vehicles, equipment, supplies, and services with public funds.
9. Explain the process of predicting and budgeting for capital needs to meet fire department objectives.
10. Identify the commons sources of grant funding and how grants can impact fire department operations.
11. Describe the most common procedures for auditing the use of public funds and how chief fire executives can be held accountable for spending decisions.
12. Explain the options available to chief fire executives for managing a reduction in funding.
13. Identify a specific problem related to the funding of emergency management activities and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2623** **Special Problems in Emergency Management**

Description: This course provides selected problems that deal with local emergency management needs. Students utilize critical thinking skills and perform the necessary research to develop effective solutions.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Identify and investigate various issues that pose a special concern or unique threat to the delivery of fire and emergency services.

2. Identify areas of ongoing fire related research and the organizations or programs that have developed applications to reduce hazardous situations.

3. Investigate, evaluate and interpret research in the areas of fire service operations, fire dynamics, and fire prevention.

4. Investigate, evaluate and interpret research in the area of fire test standards and code development.

5. Explain current trends that indicate future developments in fire related research.

6. Demonstrate the ability to utilize various informational and media resources to collect data related to a specific fire or emergency service problem.

7. Complete a formal research proposal on a problematic emergency management topic and apply a recognized method of investigation, organization, and presentation.

Course Number and Name: **ECT 2433** **Public Information and Awareness**

Description: This course provides an overview of the basic skills needed to perform the duties of a public information officer (PIO) as the job relates to emergency management. The course focuses on the various methods used to disseminate public information during the time surrounding an emergency.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Define the national fire problem and main issues relating to the accidental causes of fire.
2. Describe the need, responsibilities, and importance of fire prevention as part of an overall mix of fire protection.
3. Describe the need, responsibilities, and importance of fire prevention organizations.
4. Determine the minimum professional qualifications at the state and national level for Fire Inspector, Fire Investigator, and Fire and Life Safety Educator.
5. Define the purpose and elements of an effective plan review program.
6. Identify the laws, rules, codes, and other regulations relevant to fire protection of the authority having jurisdiction.
7. Define the purpose and elements of an effective fire and life safety education program.
8. Define the purpose and elements of an effective media campaign used to promote fire prevention.
9. Discuss the major programs for public education.
10. Identify a specific problem related to emergency management involving public awareness and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2613** **Hazardous Weather Operations**

Description: This course provides detailed information on weather-related hazards and the necessary coordination and communication of warning information. Additional focus is given towards the relationship between forecasters and emergency management when issuing appropriate warnings for such events.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Develop an understanding of the systems used to detect and measure the severity of weather conditions.
2. Develop an understanding of the tactical considerations that must be considered when issuing weather warnings.
3. Describe the various ways the general public responds to information and warnings regarding hazardous weather events.
4. Explain the role the media plays in maintaining public awareness during a hazardous weather event.
5. Describe the impact a hazardous weather event can have on the various modes of transportation.
6. Develop an understanding of the communication systems used to link weather forecasting services with emergency management providers.
7. Describe the use of forecast models in predicting hazardous weather events and their expected level of severity.
8. Define the term “threshold event” and explain how it can impact the delivery of local emergency services.
9. Explain the use of community based shelters as a component of hazardous weather operations.
10. Identify a specific problem related to an emergency management concept involving a hazardous weather operation and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2713** **Technical Practicum**

Description: This course allows emergency management personnel to implement knowledge and experience by functioning in the career field. The experience is designed to integrate the student's academic and technical skills into a real-world work environment.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Develop an understanding of how emergency managers function under realistic conditions.
2. Identify the various laws and regulations that mandate the appointment of an emergency manager and direct the functions associated with the position.
3. Develop an understanding of the financial considerations necessary to administer an emergency management agency.
4. Develop an understanding of how emergency managers prepare on a daily basis for potential hazards.
5. Describe the sources of funding used to provide emergency management services.
6. Explain the political environment and structure that supports local emergency management functions.
7. Describe the various non-emergent functions that are often assigned to the local emergency management agency.
8. Identify a specific problem related to an emergency management concept involving the practicum experience and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2813** **Response to Terrorism**

Description: This course addresses the special concerns and hazards encountered at incidents resulting from acts of terrorism or other criminal intent. Specific issues include responder safety, incident management, and weapons of mass destruction. Additional emphasis is placed on developing working relationships between response agencies involved with terrorism incidents.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Identify and analyze the nature of terrorism and its intended purpose and goals.
2. Identify and analyze the types of terrorism and the targets used by terrorist to achieve certain goals.
3. Describe the tools, methods, and tactics used by terrorist to achieve certain goals.
4. Explain the government's role in preparing for a terrorist attack including the investigation of possible threats and the use of preemptive strikes against such threats.
5. Describe the need for a coordinated response among all emergency service disciplines and all levels of government when managing the effects of a terrorist attack.
6. Identify public safety resources that are vulnerable to terrorist activity and any attempt to degrade emergency response capabilities.
7. Evaluate the impact of terrorism against a population and the community's response to defend against such acts.
8. Identify a specific problem related to an emergency management concept involving terrorism and apply research information toward the development of a proposed solution.

Course Number and Name: **ECT 2833** **Principles of Transportation Security**

Description: History demonstrates that transportation plays an important role in the outcome of a terrorist attack. Likewise, the various modes of commercial transportation provide multiple methods for the concealment and delivery of weapons of mass destruction. This course focuses on the methods and procedures used to safeguard our transportation system and the steps local governments can take to improve the security of transportation facilities.

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
3	3	0	45

Prerequisite: Instructor Approved

Student Learning Outcomes:

1. Identify and analyze various acts that pose a threat to all transportation modes and infrastructure.
2. Identify and analyze the challenges faced by security systems to provide adequate protection.
3. Analyze both local and regional conditions to develop an understanding of how community transportation systems are planned, implemented, and managed.
4. Describe the methods, and tactics used by security forces to protect transportation modes and infrastructure.
5. Explain how various transportation systems interact across multiple modes to deliver the goods and cargo that fuel economic growth.
6. Identify critical surface transportation assets, their potential vulnerabilities for attack, and the development of countermeasures to prevent or minimize such threats.
7. Explain the technical security measures that are necessary to reduce system vulnerabilities, prevent unauthorized access, and mitigate terrorist attacks.
8. Describe how and why transportation security threats change due to regional, political, and ideological conditions.
9. Evaluate the impact and cost of developing and maintaining an effective transportation security system.
10. Identify a specific problem related to an emergency management concept involving transportation security and apply research information toward the development of a proposed solution.

Course Number and Name: **WBL 191(1-3), WBL 192(1-3), WBL 193(1-3), WBL 291(1-3), WBL 292(1-3), and WBL 293(1-3)** **Work-Based Learning I, II, III, IV, V, and VI**

Description: A structured work-site learning experience in which the student, program area teacher, Work-Based Learning Coordinator, and worksite supervisor/mentor develop and implement an educational training agreement. Designed to integrate the student's academic and technical skills into a work environment. Includes regular meetings and seminars with school personnel for supplemental instruction and progress reviews. (1-3 sch: 3-9 hours externship)

Hour Breakdown:

Semester Credit Hours	Lecture	Lab	Contact Hours
4	2	4	90

Prerequisite: Instructor approved

Student Learning Outcomes:

1. Apply technical skills and related academic knowledge needed to be a viable member of the workforce.

a. Apply technical skills needed to be a viable member of the workforce.
b. Apply skills developed in other related courses in a work-based setting.
c. Perform tasks detailed in an educational training agreement at the work setting.

2. Apply general workplace skills to include positive work habits and responsibilities necessary for successful employment.

a. Demonstrate pro-active human relationship skills in the work setting to include conflict resolution, team participation, leadership, negotiation, and customer/client service.
b. Demonstrate time, materials, and resource management skills.
c. Demonstrate critical thinking skills such as problem solving, decision making, and reasoning.
d. Demonstrate acquiring, evaluating, organizing, maintaining, interpreting, and communicating information.
e. Demonstrate positive work habits and acceptance of responsibilities necessary for successful employment.

APPENDIX A: RECOMMENDED TOOLS AND EQUIPMENT

CAPITALIZED ITEMS

1. TV monitor

NON-CAPITALIZED ITEMS

1. Microcomputer integrated software package (word processing, spreadsheet, and database)
2. LCD video projector
3. VCR/DVD player

APPENDIX B: CURRICULUM DEFINITIONS AND TERMS

Course Name – A common name that will be used by all community colleges in reporting students

Course Abbreviation – A common abbreviation that will be used by all community and junior colleges in reporting students

Classification – Courses may be classified as the following:

a. Career Certificate Required Course – A required course for all students completing a career certificate.
b. Technical Certificate Required Course – A required course for all students completing a technical certificate.
c. Technical Elective – Elective courses that are available for colleges to offer to students.

Description – A short narrative that includes the major purpose(s) of the

Prerequisites – A listing of any courses that must be taken prior to or on enrollment in the course

Corequisites – A listing of courses that may be taken while enrolled in the course

Student Learning Outcomes – A listing of the student outcomes (major concepts and performances) that will enable students to demonstrate mastery of these competencies

The following guidelines were used in developing the program(s) in this document and should be considered in compiling and revising course syllabi and daily lesson plans at the local level:
The content of the courses in this document reflects approximately 75% of the time allocated to each course. The remaining 25% of each course should be developed at the local district level and may reflect the following:

Additional competencies and objectives within the course related to topics not found in the state framework, including activities related to specific needs of industries in the community college district
Activities that develop a higher level of mastery on the existing competencies and suggested objectives
Activities and instruction related to new technologies and concepts that were not prevalent at the time the current framework was developed or revised
Activities that include integration of academic and career–technical skills and course work, school-to-work transition activities, and articulation of secondary and postsecondary career–technical programs
Individualized learning activities, including work-site learning activities, to better prepare individuals in the courses for their chosen occupational areas.

Sequencing of the course within a program is left to the discretion of the local college. Naturally, foundation courses related to topics such as safety, tool and equipment usage, and other fundamental skills should be taught first. Other courses related to specific skill areas and related academics, however, may be sequenced to take advantage of seasonal and climatic conditions, resources located outside of the school, and other factors. Programs that offer an Associate of Applied Science Degree must include all of the required Career Certificate courses, Technical Certificate courses **AND** a minimum of 15 semester hours of General Education Core Courses. The courses in the General Education Core may be spaced out over the entire length of the program so that students complete some academic and Career Technical courses each semester. Each community college specifies the actual courses that are required to meet the General Education Core Requirements for the Associate of Applied Science Degree at their college.

In order to provide flexibility within the districts, individual courses within a framework may be customized by doing the following:

Adding new student learning outcomes to complement the existing competencies and suggested objectives in the program framework.
Revising or extending the student learning outcomes
Adjusting the semester credit hours of a course to be up 1 hour or down 1 hour (after informing the Mississippi Community College Board [MCCB] of the change)

APPENDIX C: COURSE CROSSWALK

COURSE CROSSWALK

Emergency Management & Communication Technology

CIP 43.9999 Security and Protective Services, Other

Note: Courses that have been added or changed in the 2019 curriculum are highlighted.

Existing			Revised		
2012 MS Curriculum Framework			**2019 MS Curriculum Framework**		
Course Number	**Course Title**	**Hours**	**Course Number**	**Course Title**	**Hours**
ECT 1113	Principles of Emergency Management	3	ECT 1113	Principles of Emergency Management	3
ECT 1123	Fire Service Operations	3	ECT 1123	Fire Service Operations	3
ECT 1213	Law Enforcement Operations	3	ECT 1213	Law Enforcement Operations	3
ECT 1223	Principles of Public Safety Communications	3	ECT 1223	Principles of Public Safety Communications	3
ECT 1613	Mass Casualty Incident Management	3	ECT 1613	Mass Casualty Incident Management	3
ECT 1813	Dynamics of Homeland Security	3	ECT 1813	Dynamics of Homeland Security	3
ECT 2313	Hazardous Materials	3	ECT 2313	Hazardous Materials	3
ECT 2323	Incident Management Systems	3	ECT 2323	Incident Management Systems	3
ECT 2333	Emergency Planning	3	ECT 2333	Emergency Planning	3
ECT 2413	Emergency Personnel Supervision	3	ECT 2413	Emergency Personnel Supervision	3
ECT 2423	Disaster Response & Recovery	3	ECT 2423	Disaster Response & Recovery	3
ECT 2433	Public Info. & Awareness	3	ECT 2433	Public Info. & Awareness	3
ECT 2613	Hazardous Weather Operations	3	ECT 2613	Hazardous Weather Operations	3
ECT 2623	Special Problems in Emergency Management	3	ECT 2623	Special Problems in Emergency Management	3
ECT 2713 or EMS 1118	Emergency Management Technical Practicum or Emergency Medical Technician	3 or 8	ECT 2713 or EMS 1117	Emergency Management Technical Practicum or Emergency Medical Technician	3 or 7
ECT 2813	Response to Incidents of Terrorism	3	ECT 2813	Response to Terrorism	3
ECT 2833	Principles of Transportation Security	3	ECT 2833	Principles of Transportation Security	3

APPENDIX D: RECOMMENDED TEXTBOOK LIST

Recommended Textbook List CIP 43.9999 Security and Protective Services, Other		
Book Title	**Author(s)**	**ISBN**
Introduction to Emergency Management (4th ed.)	Haddow, G.	978-1856179591
Introduction to Fire Protection (4th ed.)	Klinoff, R.	978-1439058428
Law Enforcement in the United States (2nd ed.)	Conser, Russell, Paynich, and Gingerich	978-0763799380
Telecommunicator (1st ed.)	IFSTA	978-0879391973
Hazardous Materials Strategies and Tactics (1st ed.)	Lesak, D.	
National Incident Management System: Principles and Practice (2nd ed.)	Walsh, Christen, Miller, Callsen, Cilluffo, and Maniscalco	
Emergency Management: Principles and Practice for Local Governments (2nd ed.)	ICMA	978-0873267199
Effective Supervisory Practices (4th ed.)	ICMA	
Understanding Terrorism (3rd ed.)	Martin, G.	
Public Information Officer (1st ed.)	Politano, P.	978-0131719231
Budgeting - A Guide for Local Governments (1st ed.)	Bland, R. and Rubin, I	
The EMS Incident Management System – EMS Operations for Mass Casualty and High Impact Incidents (1st ed.)	Christen, H. and Maniscalco, P.	978-0893039721
Meteorology Today – An Introduction to Weather, Climate, and the Environment (8th ed.)	Ahrens, C.	
Introduction to Security (8th ed.)	Green, G. and Fischer, R.	
Homeland Security and Terrorism (1st ed.)	Howard, R., Forest, J., and Moore, J.	
Fire inspection and code enforcement (7th ed.)	IFSTA	