National Fire Academy FESHE Model Curriculum EMS (Non-Core)

January 2018

TABLE OF CONTENTS

EMS Education (C240)

Course Description

This is an upper-level baccalaureate course for students interested in the theory and practice of EMS education.

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1.   Describe principles of EMS education.

2.   Describe the philosophical foundations of EMS education.

3.   Describe principles of ethics, standards, and legal considerations in EMS education.

4.   Describe the types of EMS education programs.

5.   Identify the traits and needs of learners.

6.   Define the psychology of learning.

7.   Describe strategies for educational planning and curriculum development.

8.   Describe strategies for determining and communicating educational needs.

9.   Define instructional goals and competencies.

10.   Describe strategies for packing the EMS education program.

11.   Discuss how to evaluate an EMS education program.

12.   Describe principles of educational measurement.

13.   Describe principles of student evaluation and remediation.

14.   Discuss how to use educational materials and media.

15.   Describe principles of lesson planning.

16. Describe principles of instructional strategies and methodology.

17. Describe strategies for classroom management.

18. Describe strategies for laboratory, clinical, and field internship instruction.

19. Describe principles of EMS education in the academic setting.

20. Explain the importance of professional development.

Course Objectives

Module 1: The Context of EMS Education

After completing this module, you will be able to:

1. Discuss the scope of adult education as a discipline.

2. Discuss the relationship between adult education, higher education, and EMS education.

3. Describe documents that have contributed to the development of EMS education.

4. Describe the entry-level competencies for EMS educators.

Module 2: Philosophical Foundations of EMS Education

After completing this module, you will be able to:

1. Explain the value of studying education philosophy.

2. Describe the basic frameworks of progressive education and humanistic education.

3. Provide examples of learning activities that are consistent with the principles of progressive education and humanistic education.

4. Discuss how elements of progressivism and humanism can be incorporated into the competency-based National EMS Education Standards.

Module 3: Ethics, Standards, and Legal Considerations in EMS Education

After completing this module, you will be able to:

1.   List national, State, and local regulations, policies, and procedures related to EMS education programs.

2.   Defend the need for national, State, and local guidelines for EMS education programs.

3.   Discuss Federal, State, and local laws that affect the EMS teaching profession and educational institutions.

4.   Discuss legal considerations regarding copyright and intellectual property issues.

5.   Define liability and negligence as related to standards of instruction.

6.   Discuss areas of legal liability and risk-management consideration for the student, instructor, and educational institution.

7.   Explain the importance of confidentiality of student information.

8.   Differentiate between ethics and morals.

9.   Compare theories of morality as they relate to human development and conduct.

10.   Discuss the NEA Code of Ethics.

11.   Provide examples of ethical instructor conduct.

12.   Provide examples of unethical instructor conduct.

13.   Describe ethical role models in the classroom, lab, clinical, and field internship settings of EMS education.

14.   Discuss how ethics can be incorporated into EMS curricula.

15.   Explain why instructors should adhere to the principles of ethical and legal conduct.

Module 4: Institutions, Settings, and Types of EMS Education Programs

After completing this module, you will be able to:

1.   Describe the different settings in which the EMS instructor may practice.

2.   Differentiate between primary, refresher, and continuing EMS education.

3. Describe the purpose of traditional classroom, laboratory, clinical, field internship, online, and virtual classroom EMS education.

4. Qualities, Competencies, Roles, and Responsibilities of EMS Instructors.

5. Discuss the affective traits and professional competencies required of an EMS instructor.

6. Define the roles and responsibilities of an EMS instructor.

7. Differentiate between the roles and responsibilities of primary and secondary EMS instructors.

8. Explain the importance of continuing professional development in EMS education.

9. Describe pathways for continuing professional development.

10. Discuss how an EMS instructor can effect a positive relationship with students, other instructors, staff, the program director, and the medical director.

11. Identify resources for EMS educational research.

Module 5: The Traits and Needs of Learners

After completing this module, you will be able to:

1. Define learning style.

2. Define learning preference.

3. Discuss how to categorize learning styles.

4. Describe teaching methods and learning activities that advocate the students' learning style.

5. Discuss how to challenge weaknesses associated with a given learning style.

6. Discuss the impact of personality type on learning styles and preferences.

7. Identify resources for measuring students' learning styles and preferences.

8. Discuss the instructor's own learning style and its impact on teaching.

9. Describe the characteristics of adult learners.

10. Compare learning styles and preferences.

11.   Integrate theories of motivation into planning, teaching, evaluation, and counseling activities.

12.   Discuss how cultural background can influences the learner's perceptions and expectations.

13.   Discuss how to create cultural awareness in EMS education.

Module 6: The Psychology of Learning

After completing this module, you will be able to:

1.   Define learning.

2.   Describe the concepts of progressivism and constructivism as related to learning.

3.   Describe the roles of working memory and long-term memory in learning.

4.   Discuss how the role of experience relates to learning.

5.   Describe the importance of reflection on experience.

6.   Describe the usefulness and limitations of models of learning.

7.   Define the three domains of learning.

8.   Provide examples of activities related to each domain of learning.

Module 7: Educational Planning and Curriculum Development

After completing this module, you will be able to:

1.   Define curriculum.

2.   List the components of a curriculum.

3.   Define competency-based education.

4.   Synthesize a planning model in developing a curriculum.

5.   Discuss how to synthesize the National EMS Education Standards to develop EMS curricula.

6.   Discuss how to implement a systematic approach to EMS program planning.

Module 8: Determining and Communicating Educational Needs

After completing this module, you will be able to:

1.	Explain the importance of conducting a needs analysis/assessment for an EMS education program.

2.	Explain the importance of conducting job/occupational/practice analysis as the basis for determining educational competencies.

3.	Explain the importance of performing a task analysis when teaching psychomotor skills.

4.	Conduct a needs analysis/assessment for an EMS educational program.

5.	Conduct a task analysis for a selected psychomotor skill.

6.	Explain the importance of a training proposal.

7.	Create a training proposal.

Module 9: Instructional Objectives

After completing this module, you will be able to:

1.	Define goals.

2.	Define competencies.

3.	Define objectives.

4.	Explain the relationship between goals, competencies, and objectives.

5.	Explain the relationship between objectives, lesson plan content, teaching-learning activities, and evaluation.

6.	Discuss how to select the appropriate level and domain when writing objectives.

7.	Create a set of objectives for a given competency.

8.	Discuss how a teaching-learning activity or test item reflects the behavior identified by an objective.

9.	Explain the importance of developing writing skills and understanding instructional objectives.

Module 10: Packaging the EMS Education Program

After completing this module, you will be able to:

1.   Discuss how to formulate credit hours.

2.   Describe formats for delivering EMS programs.

3.   Discuss how to obtain continuing education credits.

4.   Create a syllabus for an EMS course.

5.   Create a syllabus for an EMS program.

Module 11: EMS Education Program Evaluation

After completing this module, you will be able to:

1.   Explain the purpose of an EMS course evaluation.

2.   Explain the purpose of an EMS program evaluation.

3.   List the content of a course evaluation.

4.   List the content of a program evaluation.

5.   Differentiate between methods of evaluation and evaluation tools.

6.   Distinguish between formal and informal evaluations.

7.   List methods and tools for assessing an EMS educational program.

8.   Create a plan for a program evaluation.

Module 12: Educational Measurement

After completing this module, you will be able to:

1.   Differentiate between a norm-referenced and criterion-referenced evaluation.

2.   Distinguish between reliability and validity.

3.   Discuss the relationship between reliability and validity.

4.   Define cut score.

5.   Discuss how to calculate descriptive statistics for examinations.

6.   Discuss how to assign grades.

7.   Compare quantitative and qualitative methods of student evaluation.

8.   Explain the importance of a table of specifications for an examination.

9.   Create a table of specifications for a selected examination.

10.   Discuss how to reduce evaluation-related student anxiety.

11.   List considerations for administering an examination.

Module 13: Student Evaluation and Remediation

After completing this module, you will be able to:

1.   Discuss the benefits of using specific types of assignments and evaluation items.

2.   Differentiate between the method of evaluation and the evaluation instrument.

3.   Define inter-rater reliability.

4.   Describe instruments used for clinical, affective, psychomotor, and integration exercise evaluations.

Module 14: Instructional Materials and Media

After completing this module, you will be able to:

1.   Distinguish between high- and low-quality teaching and learning resources.

2.   List the types of instructional materials.

3.   List the types of instructional media.

4.   Discuss how to select instructional materials and media.

5.   Describe the benefits to using audiovisual materials.

6.   Discuss how to effectively use instructional materials and media.

7.   Compare the advantages and disadvantages of audiovisuals.

Module 15: The Lesson Plan

After completing this module, you will be able to:

1.   Discuss the importance of using a lesson plan.

2.   List the components of a lesson plan.

3.   Describe the components of a lesson plan.

4.   Create a lesson plan.

Module 16: Instruction Instructional Methodology

After completing this module, you will be able to:

1.   Compare methods of instruction: uses, advantages, and disadvantages.

2.   Prepare an instructional method based on student learning needs.

3.   Create notes for lectures and discussions.

4.   Discuss how to relate principles of effective communication to the teaching-learning transaction.

5.   Deliver an EMS subject matter presentation.

6.   Discuss how to use questions to facilitate discussion.

7.   Describe activities that support student learning.

8.   Describe case-based instruction.

9.   Describe computer-based instruction.

Module 17: Classroom Management

After completing this module, you will be able to:

1.   List the characteristics of a positive learning environment.

2.   List the types of dysfunctional student behaviors.

3.   Discuss how to formulate a plan for resolving a given student problem.

4.   Discuss how to role-model positive classroom behaviors.

5.   Describe strategies to maintain group order and productivity.

6.   Describe strategies to encourage student participation.

7.   Discuss how to relate theories of motivation to student behavior.

8.   Discuss how to mitigate dysfunctional student behavior.

9.   Describe barriers to student motivation.

10.   Describe strategies to mitigate barriers to student motivation.

Module 18: Considerations in Laboratory, Clinical, and Field Internship Instruction

After completing this module, you will be able to:

1.   Describe considerations for the administration of laboratory, clinical, and field internship activities.

2.   Describe strategies and methodologies for instruction.

3.   Discuss how to create simulation scenarios.

4.   Describe the purpose of clinical and field internship education.

5.   Discuss why preceptor training is important.

6.   Discuss how to conduct laboratory, clinical, and field internship learning.

Module 19: EMS Education in the Academic Settings

After completing this module, you will be able to:

1.   Describe the organizational structure of EMS education in the academic settings.

2.   Describe the roles and responsibilities of administrative personnel in the EMS academic setting.

3.   Describe the roles and responsibilities of EMS faculty.

Module 20: Professional Development

After completing this module, you will be able to:

1. Discuss the importance of professional development.

2. Discuss the importance of belonging to professional organizations.

3. Discuss the importance of attending conferences and other professional activities.

4. Discuss the importance of undergraduate and/or graduate education.

5. Discuss how to engage in networking.

6. Discuss the importance of creating and maintaining a professional portfolio.

7. Discuss the importance of research, writing, and presenting in professional development.

Available Texts

Foundations for the Practice of EMS Education, (2006). Melissa Alexander. Prentice Hall, New Jersey: Brady Books; ISBN-10: 0-13-119435-6, ISBN-13: 978-0-13-119435-9 http://www.bradybooks.com/store/product.aspx?isbn=0131194356

Foundations of Education: An EMS Approach NAEMSE, (2012). National Association of EMS Educators, 2nd Ed. ASIN: B00BTM2TOI, https://www.amazon.com/ Foundations-Education-Approach-Association-Educators/dp/B00BTM2TOI

Instructional Methods for Public Safety, (2011). William McClincy. Burlington, MA: Jones & Bartlett Learning; ISBN: 9780763776084, https://www.psglearning.com/ems/ continuinged/productdetails/9780763776084

Supporting References/Research for Faculty and Students

National Association of EMS Educators: www.naemse.org

National EMS Education Standards: www.ems.gov/pdf/education/National-EMS-Education-Standards-and-Instructional-Guidelines/EMR_Instructional_Guidelines.pdf

U.S. Fire Administration (USFA) Publications: http://www.usfa.fema.gov/applications/ publications.

Applied Research: Agency Research: http://www.usfa.fema.gov

Research Reports: http://www.usfa.fema.gov

Technical Reports: http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series: http://www.usfa.fema.gov/research

Learning Resource Center: http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST): http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Lessons Learned Information Sharing:

- http://www.llis.dhs.gov/member/secure/index.cfm
- http://www.usfa.fema.gov/applications/publications/techreps.cfm

Assessment

The students will be evaluated for mastery of the learning objectives course competencies by methods of evaluation to be determined by the instructor.

Points of Contact

Dr. Jeffrey Lindsey, PhD, University of Florida, Gainesville, Florida/NAEMSE rep. jtlindsey1@aol.com jeffrey.lindsey@ufl.edu;

Robert Dotterer, BSEd MEd, Paradise Valley Community College, Phoenix, Arizona, robert.dotterer@paradisevalley.edu

EMS Communications Management (C0242)

Course Description

This is an upper-level baccalaureate course for students interested in the management of an EMS Communications system. This course introduces the EMS professional to the communications systems and methodologies available to governmental and private EMS providers. Students explore issues in EMS Communications technology, software, data management, and physical plant considerations.

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1. Draw an organizational matrix that is representative of the anatomy of Emergency Medical Communications.

2. Demonstrate the communication role of Emergency Medical Service from field application to the emergency department.

3. Identify the common terminology used by Emergency Medical Service technicians and paramedics during emergency field operations.

4. Evaluate the role of GIS mapping and enhanced 911 systems.

5. List the various State and Federal regulations that affect the Emergency Medical Communications.

6. Describe the role of the call dispatcher as it applies to prehospital emergency medical care.

7. List and describe techniques for relaying clear, effective EMS communications.

8. Identify the technical aspect of how basic radio systems work for use in the public radio system and how they are licensed.

9. Articulate the foundational security concepts and best practice principles of analog and digital public radio systems.

10. Compare and contrast "right to know" information and protected personal and personally-identifiable information.

Course Objectives

Module 1: History of EMS Communications

At the end of this module, you will be able to:

1.   Chronicle the development of a single universal call number to access emergency assistance.

      a.   Internationally
      b.   Nationally
      c.   Locally

2.   Discuss the significance of White House Office of Telecommunications National Policy Bulletin 73-1.

3.   Discuss the evolution of 9-1-1 as a single call access number to selective routing providing phone and location services.

Module 2: Processing Calls for Service

At the end of this module, you will be able to:

1.   Differentiate the benefits and weaknesses of commercially-available call processing Emergency Medical Dispatch programs, such as Medical Priority Dispatch System and the APCO Criteria Based Dispatch protocol.

2.   Compare and contrast their usage with the benefits and weaknesses of an internally-developed community program as needed.

3.   Develop a training curriculum for the EMD program utilized or selected by the community.

Module 3: Dispatching Calls for Service

At the end of this module, you will be able to:

1.   Compare and contrast the commercially-available call processing and computer-aided dispatch programs.

2.   Identify the advantages and disadvantages of utilizing a particular program for a community, ranging from rural, suburban, urban, metro city sized, and regional centers.

3.   Identify the System Status Management Plan for a community, and discuss modifications if needed.

4.   Discuss priorities of balancing contractually-obligated consumers and handling emergency calls for service.

Module 4: Telephony Infrastructure

At the end of this module, you will be able to:

1.   Understand the interrelationships between the CLEC and PSAP in relationship to emergency call routing to the emergency call center in regards to call trunking.

2.   Identify the routing of the caller utilizing a three-digit emergency access number to their CLEC and then PSAP and subsequent secondary PSAP's.

3.   Articulate the advantages and disadvantages of how a caller may access emergency services caller when using a hardwired land line versus a phone system utilizing voice over internet protocol (VOIP) and/or wireless phone sets.

4.   Discuss the use of selective routing in a community and how to properly manage the feature to ensure equal access to emergency service.

5.   Discuss the challenges of properly geo-locating a wireless caller according to the latest FCC docket for wireless access to 9-1-1.

Module 5: Radio Infrastructure

At the end of this module, you will be able to:

1.   Discuss the different public safety frequencies allocated in the 700-mHz, 800-mHz, and 900-mHz frequency bands.

2.   Discuss the commercial VHF and UHF analog frequency bands available to commercial EMS providers.

3.   Discuss the strengths and weaknesses of a trunked versus non-trunked radio system.

4.   Articulate the importance of radio interoperability and system design as it relates to APCO P25 and Department of Homeland Security directives regarding emergency radio interoperability.

5.   Compare and contrast the use of radio equipment made by different manufacturers.

6.   Discuss the use of wireless handsets with direct-call capabilities versus radio handsets.

7.   Compare and contrast the utilization of hardwired data cables versus microwave data links to connect base stations to the EMS Communications Center.

8.   Develop a communications plan for the center for normal operations.

9.   Develop a communications plan for the center for disaster operations.

10.   Develop a communicators plan for the center for special event operations.

Module 6: Information Network Infrastructure

At the end of this module, you will be able to:

1.   Identify the priorities when directing the development and/or selection of the network software for the EMS Communications Center's data network.

2.   Properly identify the security priorities when directing the development of a network security plan to prevent access by unauthorized users.

3.   Articulate the Federal, State, and local regulations governing the data security of an emergency call center.

Module 7: Physical Plant

At the end of this module, you will be able to:

1.   Be able to articulate the need for redundant systems in telephony, radio infrastructure, information network services, and software.

2.   Be able to identify the proper backup systems for mission-critical programs in the center.

3.   Discuss the need to properly select call center furniture and call processing work stations for personnel in compliance with Federal, State, and local regulations.

4.   Discuss the process to ensure that the communications center is safe from natural disasters, such as earthquake, tornado, flooding, hurricane, and acts of terrorism.

5.   Develop contingency plans for extended operations in the event of a significant event.

Module 8: Quality Assurance/Quality Improvement

At the end of this module, you will be able to:

1.   Articulate the priorities and essential qualifications for medical direction of an EMS Call Center.

2.   Develop the duties and responsibilities of the EMS Call Center medical director.

3. Develop policies and protocols to ensure the confidentiality of the EMD QA/QI process.

4. Develop policies and protocols to reflect local employment regulations and/or collective bargaining agreements in relationship to the EMD QA/QI performance improvement process.

5. Discuss the advantages and disadvantages of commercially-available EMS QA/QI programs.

6. Develop a risk-management protocol for the EMS Communications Center as it relates to call taking, call processing, and call dispatching.

Module 9: Regional Coordination

At the end of this module, you will be able to:

1. Identify the relationship of the local EMS Communications Center with the local/county Emergency Operations Center.

2. Identify the relationship of the EMS Communications Center to other emergency communication centers in the community.

3. Articulate the differences in a consolidated regional EMS Communications Center versus separate centers.

4. Discuss the benefits and disadvantages of consolidated regional EMS Communications Centers verses separate centers.

5. Discuss the relationship of the local EMS Communications Center with a Regional Emergency Operations Center (REOC).

6. Discuss the relationship of the local EMS Communications Center with a State Communication/Coordination Center.

Available Texts

Emergency Dispatching: A Medical Communicator's Guide, (1992). Susi B. Steele. Pearson Publishing; ISBN-13: 978-0893038359, ISBN-10: 0893038350, https://www.amazon.com/b?node=16491659011

Supporting References/Research for Faculty and Students

U.S. Fire Administration (USFA) Publications: http://www.usfa.fema.gov/applications/ publications.

Applied Research: Agency Research: http://www.usfa.fema.gov

Research Reports: http://www.usfa.fema.gov

Technical Reports: http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series: http://www.usfa.fema.gov/research

Learning Resource Center: http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST): http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Lessons Learned Information Sharing:

- http://www.llis.dhs.gov/member/secure/index.cfm
- http://www.usfa.fema.gov/applications/publications/techreps.cfm

Because of the limited textbook availability and dynamic nature of this subject material we suggest the instructor build content to include contemporary readings.

Assessment

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Point of Contact

Sebastian Wong BA EMT-P, Adjunct Faculty, Las Positas College, Livermore, CA
mailto:sewong@laspositascollege.edu

Finance of EMS Systems (C0243)

Course Description

This is an upper-level baccalaureate course for students interested in the practice and principles of emergency medical services systems finance and budget and the processes that contribute to assets and liabilities of an Emergency Medical Service System. This course introduces the EMS professional to topics to include but not limited to: budgeting, auditing, billing, risk financing, and internal auditing.

Prerequisites

None

Course Outcomes

EMS Management will expose the participant to the variety of practices utilized in long- and short-term system financing of an EMS agency. Participants will effectively demonstrate the principals and applications of finance management to organizations in general, and to EMS organizations in particular.

Upon completion of this course, you will be able to:

1.   Demonstrate an understanding of areas and responsibilities related to financing an EMS system.

2.   Identify the importance of additional funding resources, such as EMS billing, grant preparations, and other available revenues.

3.   Define the fundamental components within a budgeting process, such as research, analysis, calculation, and forecast budgeting.

4.   Communicate budgetary and financial information in various written documents including the creation of financial reports.

5.   Evaluate a company's proposal contract to determine the significance involving future revenue.

6.   Develop a request for proposal (RFP) involving a significant capital EMS purchase, including an oral or electronic media presentation of a budgetary or financial request.

Course Outline

Module 1: Accounting Conventions

At the end of this module, you will be able to:

1.   Identify and use financial statements and reports.

2.   Define a balance sheet.

3.   Build an income statement.

4.   Identify cash flow.

5.   Discuss accrual accounting.

6.   Describe a cash flow cycle.

7.   Conduct a cash flow analysis.

8.   Define policies for managing finance.

Module 2: Accounting Discipline

At the end of this module, you will be able to:

1.   Define public accounting.

2.   Differentiate governmental accounting.

3.   Define management accounting.

4.   Compare and contrast tax and financial accounting.

5.   Identify cost accounting.

6.   Explain cost management.

7.   Discuss operational management.

Module 3: Accounting Principles

At the end of this module, you will be able to:

1.   Define principles of regularity.

2.   Define principles of consistency.

3.   Define principle of sincerity.

4.   Define principle of the permanence of methods.

5.   Define principle of non-compensation.

6.   Define principle of prudence.

7.   Define principle of continuity.

8.   Discuss marginalism.

9.   Apply consistency to an EMS financial program.

10.   Identify matching.

11.   Apply cash accounting procedures.

12.   Explain pre-paid expenses.

Module 4: Inventory Control

At the end of this module, you will be able to:

1.   Identify procedures for determining inventory.

2.   Discuss ordering cost.

3.   Define procedures for economic ordering quantity.

Module 5: Depreciation

At the end of this module, you will be able to:

1.   Describe straight line depreciation.

2.   Differentiate declining balance from straight line depreciation.

3.   Discuss sum of the year.

Module 6: Role of Finance

At the end of this module, you will be able to:

1.   Explain criteria for financial management.

2.   Define the following economic concepts:

        a.   Microeconomics.
        b.   Macroeconomics.
        c.   Supply and demand.
        d.   Cost benefit analysis.
        e.   Interest rates.
        f.   Present and future value of money

Module 7: Role of Finance

At the end of this module, you will be able to:

1.   Define allocation of resources.

2.   Explain and model.

3.   Forecasting.

4.   High end and low end forecasting.

5.   Forecasting models.

Module 8: Financial Decision Making

At the end of this module, you will be able to:

1.   Explain territory and finance.

2.   Discuss sensitivity testing.

3.   Describe a break-even analysis.

4.   Discuss how to measure uncertainty.

5.   Explain cash management.

6.   Discuss working capital.

7.   Write a cash budget.

8.   Explain idle cash.

9.   Provide examples of long-term debt financing.

Module 9: Budgeting

At the end of this module, you will be able to:

1.   Describe traditional budgeting activities.

        a.   Financial planning and control.
        b.   Working capital.

2.   Define operational revenue.

3.   Compare and contrast expenses and costs.

4.   Differentiate between the four types of budgets:

        a.   Incremental budgets.
        b.   Priority incremental budgets.
        c.   Line item budgets.
        d.   Zero-based budgets.

5.   Describe a capital budget process.

6.   Project cash flow and risk.

Module 10: Purposes and Benefits of a Master Budget

At the end of this module, you will be able to:

1.   Explain how this guides performance.

2.   Identify the limitations of a master budget.

3.   Discuss assumptions of a master budget.

4.   Prepare a master budget.

5.   Prepare an operating budget to include:

      a.   Revenue.
      b.   Direct material.
      c.   Direct labor.

Module 11: Role of Risk Management

At the end of this module, you will be able to:

1.   Explain transaction cost theory.

2.   Define resource dependency theory.

3.   Discuss risk sharing and the following aspects:

      a.   Reactive purchasing.
      b.   Strategic partnerships and vendors.
      c.   Competitive bidding.

Module 12: Contracts

At the end of this module, you will be able to:

1.   Differentiate and discuss various contract types.

2.   Identify contract execution special considerations.

Module 13: Quality Control

At the end of this module, you will be able to:

1.   Define warranty.

2.   Identify a waiver and its application.

3.   Describe bonds.

4.   Discuss breaches and their impact on business.

Module 14: Negotiation

At the end of this module, you will be able to:

1.   Identify the stages of negotiation.

2.   Explain negotiation tactics.

3.   Discuss how to properly prepare for negotiation.

Module 14: EMS Billing Rules and Regulations

At the end of this module, you will be able to:

1.   Identify Medicare and Medicaid rules and requirements.

2.   Discuss the false claims act.

Module 15: Checks and Balances

At the end of this module, you will be able to:

1.   Describe the auditing process.

2.   Discuss accounting assurance.

3.   Explain corporate governance.

4.   Compare and contrast different types of audits.

Available Texts

EMS Finance, (2015). Dennis Mitterer & Jeffrey T. Linsey. Pearson Publishing; ISBN-10: 0-13-507482-7, ISBN-13: 978-0-13-507482-4, http://www.bradybooks.com/store/product.aspx?isbn=0135074827

Supporting References/Research for Faculty and Students

U.S. Fire Administration (USFA) Publications: http://www.usfa.fema.gov/applications/publications.

Applied Research: Agency Research: http://www.usfa.fema.gov

Research Reports: http://www.usfa.fema.gov

Technical Reports: http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series: http://www.usfa.fema.gov/research

Learning Resource Center: http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST): http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Lessons Learned Information Sharing:

- http://www.llis.dhs.gov/member/secure/index.cfm
- http://www.usfa.fema.gov/applications/publications/techreps.cfm

Because of the limited textbook availability and dynamic nature of this subject material we suggest the instructor build content to include contemporary readings.

Assessment

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Point of Contact

Diane C. Flint, University of Maryland, Baltimore County mailto:dflint1@umbc.edu

EMS Public Information and Community Relations (C0245)

Course Description

This is an upper-level baccalaureate course for students interested in public information and community relations in EMS. This course introduces the EMS professional to benefits of community information and community relations. Students explore issues in marketing, crafting the message, identifying the audience, developing programs, and creating press releases.

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1.   Explain how an understanding of public information and community relations as it pertains to EMS pertain to emergency medical services (EMS).

2.   Describe the various components of the public information and community relations.

       a.   Marketing

       b.   Messaging

       c.   Audience identification

       d.   SWOT analysis

       e.   Press releases

3.   Describe the benefits of public information and community relations.

Course Objectives

Module I: EMS Public Information, Education and Community Relations

At the end of this module, you will be able to:

1.   Define the meanings and discuss the importance of public information, education, and community relations.

2.   Identify the target audiences to keep informed for public information, education, and community relations.

3.   Identify the qualities of a successful public information officer.

Module II: Principles of Marketing

At the end of this module, you will be able to:

1.   Describe the core concepts of marketing.

2.   Discuss how the core concepts of marketing relate to the operation of an EMS agency.

3.   Identify the different marketing environments that exist within an EMS agency's jurisdiction.

4.   Define S.W.O.T. analysis.

5.   Create a S.W.O.T. analysis.

6.   Discuss how to perform marketing research.

7.   Discuss how to address messages to markets.

Module III: Public Information and Education (PIE) Tool

At the end of this module, you will be able to:

1.   Discuss the four steps of creating a Public Information and Education (PIE) Tool.

2.   Adapt a model PIE Tool to a specific department in an EMS agency.

Module IV: Audience Identification

At the end of this module, you will be able to:

1.   Identify the four main groups of target audiences.

2.   Identify different audiences within each of the four main groups of audiences.

3.   Differentiate between the roles of reporters, editors, and columnists.

Module V: Categorizing Messages by Type and Audience

At the end of this module, you will be able to:

1. Recognize the different types of incoming and outgoing messaging needs in an EMS Agency.

2. Match message topics and content with targeted audiences.

3. Recognize, create, and capitalize on opportunities to inform and educate different target audiences.

Module VI: Craft Creating the Message

At the end of this module, you will be able to:

1. Discuss how to create content for different target audiences.

2. Discuss how to write effectively for the message delivery method chosen to be used.

3. Create a message for EMS public information, education, and community relations.

4. Discuss how to use tools and techniques to blend data with other elements to improve message delivery.

Module VII: Delivering the Message

At the end of this module, you will be able to:

1. Discuss how to use different written, oral, and electronic methods to effectively deliver information to audiences.

2. Discuss how to deliver an effective oral presentation.

3. Describe strategies to maintain relationships with print and electronic media.

4. Describe strategies in using electronic media and social networking to inform and educate target audiences.

Module VIII: Press Releases

At the end of this module, you will be able to:

1.   Describe the different reasons and ways to use press release.

2.   Describe strategies for presenting a press release.

3.   Identify the essential elements of a lead.

4.   Describe the fundamentals of clear effective writing.

5.   Differentiate between hard news and features.

Available Texts

Fire and Life Safety Educator: Principles and Practice, (2018). Marsha Giesler. 2nd Ed. Burlington, MA: Public Safety Group; ISBN: 9781284041972, https://www.psglearning.com/fire/instructor/productdetails/9781284041972

Media Relations for Public Safety Professionals, (2004). Lee Brown. 1st Ed. (Burlington, MA): Jones & Bartlett Learning; ISBN: 9780763731670, https://www.psglearning.com/catalog/productdetails/9780763731670

Supporting References/Research for Faculty and Students

U.S. Fire Administration (USFA) Publications: http://www.usfa.fema.gov/applications/publications.

Applied Research: Agency Research: http://www.usfa.fema.gov

Research Reports: http://www.usfa.fema.gov

Technical Reports: http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series: http://www.usfa.fema.gov/research

Learning Resource Center: http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST): http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Lessons Learned Information Sharing:

- http://www.llis.dhs.gov/member/secure/index.cfm
- http://www.usfa.fema.gov/applications/publications/techreps.cfm

Because of the limited textbook availability and dynamic nature of this subject material we suggest the instructor build content to include contemporary readings.

Assessment

The student will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Points of Contact

Dr. Jeffrey Lindsey, Professor EMS, St. Petersburg College/NAEMSE rep. jtlindsey1@aol.com PhD, University of Florida, Gainesville, Florida jeffrey.lindsey@ufl.edu

Robert Dotterer, BSEd MEd, Paradise Valley Community College, Phoenix, Arizona, robert.dotterer@paradisevalley.edu

Management of Transport Services (C0251)

Course Description

This course provides an overview of the application of management principles to the provision of transport services. It includes an analysis of the economic, geographic, temporal, and clinical characteristics of ambulance demand, the key processes for providing transport services, and an evaluation of industry best practices.

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1.   Describe and analyze the economic characteristics of ambulance markets.

2.   Describe the geographic and temporal characteristics of demand for transport services.

3.   Evaluate the research on the clinical characteristics of EMS patients.

4.   Describe the key processes for providing transport services, including techniques for producing quality services efficiently and effectively.

5.   Evaluate the techniques for deploying and managing EMS resources to produce reliable and efficient response time performance.

6.   Describe the best practices for the management of transport services.

Course Objectives

Module One: History of Ambulance Services and Modern Transportation Systems

At the end of this module, you will be able to:

1.   Explain the origins of ambulance services in the United States.

2.   Discuss the development of key components of EMS and the role played by ambulance services.

3.   Describe the importance of milestones in the maturation of American EMS.

4.   Explain the impact of military conflict on the creation of ambulance and emergency medical systems.

5.   Identify the most important national developments that advanced EMS in the United States.

6.   Summarize critical legislations that led to America's current state of EMS delivery.

Module Two: Levels of Ambulance Service

At the end of this module, you will be able to:

1.   Define the four levels of ambulance service.

2.   Identify the role that each of the levels of ambulance service could play in an EMS system.

3.   Explain the clinical and fiscal implications of deploying levels of care.

4.   Explain the potential impact of current research on patient outcomes for ALS and BLS levels of care and how that may impact future deployment of ALS and BLS ambulances.

Module Three: Corporate Models for Ambulance Delivery

At the end of this module, you will be able to:

1.   Distinguish an emergency medical services system from an ambulance service.

2.   List at least five different corporate models for the delivery of ambulance service to a community.

3.   Discuss key strengths, weaknesses, and attributes of each corporate model for delivery of ambulance service to a community.

4.   Explain the implications of federal anti-kickback regulations.

5.   Understand the relationship between ambulance service and hospital profits.

Module Four: The Ambulance Market

At the end of this module, you will be able to:

1.   Describe the ambulance and medical transportation market in the United States in economic terms.

2.   Explain related and overlapping markets that interact with the ambulance market.

3.   Understand the approximate demand for ambulance and related services and factors that affect that demand.

4.   Clarify the utility nature of the economics of the ambulance market, including economies of scale.

3.   Describe the effects of market exclusivity, and discuss horizontal and vertical consolidation within the market.

4.   Discuss the use of competition and the antitrust implications of creating exclusive markets.

5.   Explain various common methods used for the allocation of market rights.

6.   Identify the effects of Federal government intervention in the ambulance market, including a description of cost shifting and its predictable results on pricing.

7.   Identify a major reason that the ambulance market is likely to grow significantly over the next twenty years.

8.   Discuss strategies that ambulance service providers may pursue to expand the market and access new sources of revenue.

Module Five: Medical Transportation Scheduled

At the end of this module, you will be able to:

1.   Explain the difference between medical and nonmedical transportation.

2.   Explain the difference between scheduled and unscheduled services.

3.   Identify the role each of the different service levels plays in an ambulance service.

4.   List the three main decision points used by facilities in choosing an ambulance provider.

5.   Identify the billing implications for interfacility and intrafacility ambulance services.

Module Six: Sir Ambulance and Air Medical Transportation

At the end of this module, you will be able to:

1.   Define air medical services.

2.   Explain the common service delivery models found in air medical services.

3.   List the most common organizational models found in air medical services, and describe the key attributes of each.

4.   Describe the regulatory agencies involved in overseeing air medical service operations.

5.   Discuss the various staffing models commonly found in air medical services response.

6.   Discuss the key considerations in vehicle selection and their impact on operations.

7.   Explain the unique considerations associated with a communication center that supports air medical services.

8.   Describe the unique aspects of a comprehensive safety program within an air medical service operation.

9.   List some of the unique technology considerations associated with an air medical service operation.

10.   Describe some of the educational offerings and professional certifications available to air medical services personnel.

11.   Discuss some of the key attributes of a successful air medical service marketing program.

Module Seven: Deployment and Staffing Models

At the end of this module, you will be able to:

1.   Explain and demonstrate basis techniques of temporal or time series demand analysis.

2.   Explain the differences, advantages, and disadvantages of geographic versus demand-based ambulance deployment.

3.   Define the limitations of deterministic maximal and set-coverage geospatial modeling.

4.   Explain the importance of appropriately managing "controllable" time segments, such as chute times, hospital drop times, and lost unit hours.

5. Explain the impacts of shift scheduling patterns in system efficiency, as well as any potential negative impacts to patient clinical outcomes and operations safety.

Module Eight: Human Resources Administration

At the end of this module, you will be able to:

1. Provide a brief history of human resources as a profession.

2. Identify the functional (subspecialty) areas of human resources as a profession.

3. Identify legal mandates that provide the foundation for employee management.

4. Describe the importance of job descriptions and how they are used for employee management.

5. Identify and describe the selection and hiring process to include job posting, application/applicant review, interviews, background checks, and job offers.

6. Identify and describe the functional life cycle of an employee to include new employee orientation, performance improvement, progressive discipline, promotion, and employee departure (voluntary and involuntary).

7. Describe discipline and the process of progressive discipline.

8. Describe the process of employee mentoring and succession planning.

Module Nine: Ambulance Specification and Procurement

At the end of this module, you will be able to:

1. Describe a methodology to define the desire and need for a new ambulance for an EMS agency.

2. Identify the applicable regulations for an ambulance to be credentialed and placed into service in the State and local EMS systems.

3. Discuss the limitations in the physical vehicle based on where it will be utilized and stored.

4. Identify key features that will be required inside the ambulance module to meet the operational and clinical needs of the ambulance service.

5. Identify different ambulance construction materials, and discuss techniques for identifying the specifications that best suit the needs of the ambulance service.

6. Discuss the reasons for properly specifying the electrical requirements of an ambulance.

7. Identify the regulations that stipulate what emergency equipment, such as lights and sirens, are required or prohibited for use on ambulances. Evaluate different designs and equipment to enhance the safety of paramedics working in the ambulance, and include them within the specification document.

8. Estimate the required payload for the ambulance based on the operational and clinical needs of the ambulance service, and use this information in selecting the appropriate chassis

9. Develop a thorough plan for inspecting an ambulance prior to delivery, based on the specification and vendor build plans.

Module Ten: Patient Care Reporting Documentation and Documentation Systems

At the end of this module, you will be able to:

1. Describe and discuss the functions and importance of the patient care report.

2. Demonstrate the basic requirements for adequate patient care report writing.

3. Discuss the legal and regulatory requirements related to patient care reporting.

4. Describe the impact that patient care report documentation has on billing and collection efforts.

5. Discuss the various policies and procedures that are required for patient care report administration.

6. Discuss the emergence of electronic patient care reporting systems and the benefits that these systems bring to the EMS services that utilize them.

7. List the elements necessary for the successful procurement and implementation of electronic patient care reporting systems.

8. Discuss storage and data security in the administration of patient care reporting systems.

9. Discuss developments that will impact patient care reporting and EMS documentation in the future.

Module Eleven: Marketing Media and Community Relations

At the end of this module, you will be able to:

1.   Identify and define the various categories of organizational stakeholders.

2.   Describe the importance of utilizing technology as part of effective ambulance marketing.

3.   Identify the various types and methods of available marketing technology.

4.   Describe various types of traditional marketing mediums.

5.   Describe how to work with the press to get your message out and to provide community outreach.

6.   Identify the benefits of ongoing community outreach in positioning your organization.

Module Twelve: Ambulance Service Dispatch and Radio Communications

At the end of this module, you will be able to:

1.   Define key concepts and terms related to radio and telephone communications systems.

2.   Identify key equipment utilized in ambulance communications centers.

3.   Identify key components of a Public Safety Answering Point (PSAP).

4.   Explain key differences between methodologies of call handling and dispatch.

5.   Identify current issues regarding dispatch and radio communications, including staffing and technology.

Module Thirteen: Technology in Support of Ambulance Operations

At the end of this module, you will be able to:

1.   Identify eight technology tools that can be used to automate and enhance ambulance operations.

2.   Discuss and describe the benefits that technology tools can bring to an ambulance service.

3.   Identify the needs for operational support of an ambulance service, and select the proper technology to improve specific areas of performance.

Module Fourteen: The Finance and Accounting Operations

At the end of this module, you will be able to:

1.   Describe the financial management and accounting roles and responsibilities in an organization.

2.   Describe the standards and basic elements of accounting.

3.   Compare and contrast cash versus accrual accounting.

4.   Describe the basic financial statements and alternative names for those statements.

5.   List common sources of ambulance revenue.

6.   Describe the purpose of a budget.

7.   Explain common ambulance productivity and financial measures.

8.   List the steps in billing for ambulance service.

9.   Describe the primary payment sources for ambulance services.

10.   Explain common issues in ambulance billing and collections.

Module Fifteen: The Regulatory Environment of Ambulance Operations

At the end of this module, you will be able to:

1.   Describe the need for regulation of EMS.

2.   Describe the objectives of regulation.

3.   Compare and contrast statutes, regulations, and policy.

4.   List the areas of ambulance service that are regulated.

5.   Describe the role of local, State, and Federal regulation.

6.   Explain the role of nongovernmental organizations in EMS regulations.

7.   List the major national EMS organizations.

8.   Describe advocacy and lobbying.

9.   Explain regulatory conflict.

Module Sixteen: Legal and Compliance Issues for Ambulance Services

At the end of this module, you will be able to:

1.   Create a compliance program meeting the current criteria specified by the Department of Health and Human Services, Office of the Inspector General.

2.   Evaluate an existing compliance program to determine adequacy.

3.   Recognize the value of having a compliance program in place.

Module Seventeen: Safety Considerations for Ambulance Services

At the end of this module, you will be able to:

1.   Identify the role of the Incident Safety Officer.

2.   Explain the limitations of technology for creating a safer work environment.

3.   Compare the relationship between the EMS safety officer and the ISO.

4.   Describe why the investigation of a near-miss event is important.

5.   Explain the difference between a regulation and a standard.

Module Eighteen: Ambulance Service Activities in Support of the Community

At the end of this module, you will be able to:

1.   Describe the range of roles that an ambulance service may play in its community.

2.   Discuss the benefits to an ambulance service of taking a broad view of its role in the community.

3.   List six areas where common processes may be beneficial to the ambulance service and the patients it serves.

4.   Discuss considerations surrounding ambulance service involvement in providing medical support to community mass gatherings.

5.   Discuss considerations involved with the provision of medical support to fire service and law enforcement special operation teams and activities.

6.   Describe the benefits to the ambulance service and the community from involvement in efforts to control illnesses, reduce injuries, and provide nontraditional care to special populations in the community.

Module Nineteen: Ambulance Operations in Support of Disaster Operations

At the end of this module, you will be able to:

1.   Utilize the National Incident Management System and the Incident Command System when operationally engaged.

2.   Develop the capacity to coordinate, communicate, and collaborate prior to, during, and following critical incidents involving ambulance services and other agencies.

3.   Describe the emergency management continuum of mitigation, preparedness, response, and recovery as it relates to planning of ambulance operations in a natural, technological, or criminal disaster situation.

4.   Delineate the elements necessary to develop and execute a successful memorandum of understanding and mutual aid agreement.

5.   Conduct a needs analysis, hazard/threat survey, and a gap analysis to improve the organization's potential response to a disaster.

6.   Conduct a post-incident debriefing (after-action conference), and develop an after-action report and improvement plan.

7.   Explain the roles and responsibilities (within the Incident Command System) of the Incident Commander in the initial phases of an incident or for the totality of a smaller incident; of the EMS branch director at larger incidents involving multiple casualties; of a division/group supervisor at an incident of any size; and of a task force/strike team leader for an out-of-jurisdiction response to a major event.

Available Texts

Management of Ambulance Services, (2015). Jeffrey T. Lindsey and NEMSMA, Inc. Pearson Publishing; ISBN-10: 0135028299, ISBN-13: 9780133767469, https://www.pearson.com/us/higher-education/program/NEMSMA-Inc-Management-of-Ambulance-Services/PGM4405.html

Supporting References/Research for Faculty and Students

U.S. Fire Administration (USFA) Publications: http://www.usfa.fema.gov/applications/publications.

Applied Research: Agency Research: http://www.usfa.fema.gov

Research Reports: http://www.usfa.fema.gov

Technical Reports: http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series: http://www.usfa.fema.gov/research

Learning Resource Center: http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST): http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Lessons Learned Information Sharing:

- http://www.llis.dhs.gov/member/secure/index.cfm
- http://www.usfa.fema.gov/applications/publications/techreps.cfm

Because of the limited textbook availability and dynamic nature of this subject material we suggest the instructor build content to include contemporary readings.

Assessment

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Points of Contact

Stephen Dean, Ph.D., UMBC, 410-455-3775, sdean@umbc.edu
Bruce Walz, Ph.D., UMBC, 410-455-3223, walz@umbc.edu

Analytical Approaches to EMS (C0297)

Course Description

This is an upper-level baccalaureate course for students interested in the practice and principles of emergency medical services systems management and the processes that contribute to the effectiveness of day-to-day operations within an EMS organization. This course introduces the EMS professional to topics that include: introduction and purpose of analysis; analysis in parallel professions; problem identification; foundational analysis; data collection; financial analysis; cost-benefit analysis; policy and impact analysis; and project development.

Prerequisites

None

Course Outcomes

Upon completion of this course, you will be able to:

1.   Identify the variety of data to be collected in EMS.

2.   Demonstrate an understanding of the value of accurate information when performing an EMS analysis.

3.   Analyze a problem, issue, or growth aspect in an EMS system or organization.

4.   Construct a process to address EMS issues, and determine the most appropriate course of action for improvement.

5.   Prepare an effective EMS analysis report as part of a Fire/EMS department's strategic planning process.

Course Objectives

Module 1: Overview of Injury Prevention

At the end of this module, you will be able to:

1.   Discuss the history of injury prevention.

2.   Explain injury prevention countermeasures.

3.   Discuss the epidemiology of injuries.

Module 2: Categorizing Injuries

At the end of this module, you will be able to:

1.   Discuss unintentional injury including:

      a.   Motor vehicle accidents.

      b.   Falls.

      c.   Poisonings.

      d.   Fires and burns.

      e.   Drowning.

      f.   Asphyxiation.

      g.   Sports and recreational injuries.

      h.   Occupational injury.

2.   Discuss intentional injury including:

      a.   Self-inflicted violence.

      b.   Homicide.

      c.   Violence.

      d.   Sexual assault.

      e.   Child abuse.

      f.   Elder abuse.

Module 3: Injury Prevention Program Development

At the end of this module, you will be able to:

1.   Explain the general principles of injury prevention.

2.   Describe educational strategies.

3.   Describe environmental strategies.

Module 4: Policy and Resource Development

At the end of this module, you will be able to:

1.   Discuss injury prevention laws.

2.   Explain the role of advocates.

3.   Describe community partners.

4.   Discuss state and federal players.

Module 5: Injury Surveillance

At the end of this module, you will be able to:

1.   Define real-time surveillance.

2.   Provide examples of information sources.

3.   Discuss how to provide information to the public.

4.   Discuss access to patients.

5.   Discuss reporting patterns.

Module 6: Public Health

At the end of this module, you will be able to:

1.   Explain health promotion.

2.   Discuss the role in immunization.

3.   Describe surveillance.

4.   Describe their role in public education.

5.   Describe their role in home health care.

6.   Describe their role in behavioral health care.

7.   Describe their role in environmental health.

8.   Discuss the functions of the health department.

Module 7: Public Health Community

At the end of this module, you will be able to:

1.   Discuss the various associations.

2.   Describe the role of the U.S. Department of Health and Human Services.

3.   Compare and contrast EMS and public health.

Module 8: Assessment of Injury Prevention Program

At the end of this module, you will be able to:

1.   Discuss benefits of data collection.

2.   Describe risk assessment.

3.   Explain cost versus benefit.

4.   Discuss an evaluation of program.

Available Texts

The Practice of Social Research, (2015). Earl R. Babbie, 14th Ed. Cengage Learning; ISBN-13: 978-1305104945 ISBN-10: 1305104943, http://www.cengage.com/c/the-practice-of-social-research-14e-babbie/9781305104945#compare-buying-options

Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. John W. Creswell, 4th Ed. Sage Publications; ISBN-10: 1452226105, ISBN-13: 978-1452226101, https://www.amazon.com/Research-Design-Qualitative-Quantitative-Approaches/dp/1452226105

Supporting References/Research for Faculty and Students

U.S. Fire Administration (USFA) Publications: http://www.usfa.fema.gov/applications/ publications.

Applied Research: Agency Research: http://www.usfa.fema.gov

Research Reports: http://www.usfa.fema.gov

Technical Reports: http://www.usfa.fema.gov/applications/publications

Topical Fire Research Series: http://www.usfa.fema.gov/research

Learning Resource Center: http://www.lrc.fema.gov

National Institute for Standards and Technology (NIST): http://www.fire.nist.gov (see Publications, FIREDOC (under Publications)).

Lessons Learned Information Sharing:

- http://www.llis.dhs.gov/member/secure/index.cfm
- http://www.usfa.fema.gov/applications/publications/techreps.cfm

Because of the limited textbook availability and dynamic nature of this subject material we suggest the instructor build content to include contemporary readings.

Assessment

Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Points of Contact

David S. Becker MA, EMT-P, EFO, IAFC, dsbeckermo@msn.com

Keith A. Monosky, PhD, MPM, EMT-P Director, EMS Paramedicine Program Central Washington University, monoskyk@cwu.edu

Course Outline

I.   Introduction and Purpose of Analysis

II.   Analysis in Parallel Professions

III.   Problem Identification, Opportunities for Growth and Public Behavior

IV.   Foundational Analysis – Research Design and Basics

V.   Foundational Analysis – Quantitative Research

VI.   Foundational Analysis – Qualitative Research

VII.   Foundational Analysis – Mixed Methods Research

VIII.   Data Collection Methods

IX.   Financial Analysis

X.   Cost-Benefit Analysis

XI.   Policy and Impact Analysis

XII.   Putting it All Together

XIII.   Generating the Analysis Report

XIV.   Project Development