

Montgomery County Community College
PSA 101
Public Safety Technology
3-3-0

COURSE DESCRIPTION:

This course will focus on current themes in public safety technology, including such topics as Computer Aided Dispatch, basic ideas of mobile radio technology, mobile data/mobile computer capabilities and functionality, public safety applications for Global Positioning technology, as well as emerging trends that will appear in the Public Safety arena in the next 3 to 5 years. An overview of standards governing communications systems, dispatchers, and other areas of public safety technology will also be covered. Topics will be covered at a non-technical level to provide the student with an overview and understanding of the technology.

Requisites:

PSA 100 with a C or better

Concurrent Course Requirements:

None

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Describe the critical roles that technology plays in contemporary emergency response.	Assigned Readings Lectures Discussions Case Study Analysis AV/Multimedia Materials Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
2. Describe the theory and practical applications of current technology in the field.	Assigned Readings Lectures Discussions Case Study Analysis AV/Multimedia Materials Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study
3. Describe applicable regulatory standards and guidelines governing public safety technology systems.	Assigned Readings Lectures Discussions Case Study Analysis AV/Multimedia Materials Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study
4. Use procedures and methodologies for evaluating competing bids for hi-tech products and services, and their ability to contribute knowledgeably to public purchasing decisions.	Assigned Readings Lectures Discussions Case Study Analysis AV/Multimedia Materials Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study
5. Use technology across the interdisciplinary plane to facilitate and serve the objectives of interagency cooperation and coordination within the principles of unified incident command	Assigned Readings Lectures Discussions Case Study Analysis AV/Multimedia Materials Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study
6. Evaluate emergency response systems breakdowns, and determine whether weaknesses are human or technological, and whether technological solutions are applicable to the problem.	Assigned Readings Lectures Discussions Case Study Analysis AV/Multimedia Materials Field Trips Essay Assignments Directed Research Quizzes and Exams	Multiple-Choice Exam Graded Essay Graded Essay Exam Assignments Graded Research Project Individual or Group Presentation Graded Class Discussion Graded Case Study

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

SEQUENCE OF TOPICS:

1. Evolution and standards of public safety technology
2. Communication systems and their components
3. Interoperability and its benefits and long term interoperability plans, design, and systems
4. Key ideas of mobile data networks and their benefits to field providers
5. Explanation of the basic systems available – private networks, public networks, hybrid systems
6. Introduction to Computer Aided Dispatch (CAD) systems
7. Use of the Global Positioning System in public safety technology applications, introduction of Geographic Information Systems (GIS) and their use, and biometric identification in the public safety arena.
8. Understanding field user needs, adherence to a specific project schedule and progress reporting
9. Understanding how public safety project management differs from other forms of management and potential pitfalls and how to address unique needs.
10. Understand the key concepts of information sharing in law enforcement as well as the challenges faced and an overview of laws governing what information can be shared, how, and by whom.
11. Understand technologies with broad interdisciplinary use.
12. Focus on key emerging technology and the impact change how public safety providers do their jobs.

LEARNING MATERIALS:

1. *Managing Crises and Disasters with Emerging Technologies: Advancements* (2012) by Murray Jennex (San Diego State University)
2. Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

COURSE APPROVAL:

Prepared by: Jayden Sampson

Date: 10/2019

Provost or designee Compliance Verification:

Date: 2/26/2020



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