



MASTER COURSE OUTLINE

Prepared By: Tom Willingham

Date: April 2019

COURSE TITLE

Mission Critical Operations Management I

GENERAL COURSE INFORMATION

Dept.: WKED

Course Num: 110

(Formerly:)

CIP Code: 52.0205

Intent Code: 21

Program Code: 622

Credits: 3

Total Contact Hrs Per Qtr.: 33

Lecture Hrs:33

Lab Hrs:

Other Hrs:

Distribution Designation: General Elective (GE)

COURSE DESCRIPTION (as it will appear in the catalog)

Introduction to the technical operations management of systems, facilities, equipment, and processes critical to the production of goods and services. Students may explore this topic within a related industry of their choice.

PREREQUISITES

None

TEXTBOOK GUIDELINES

Text and materials as decided by faculty. (Example: Instructors should use free or online resources as much as possible. There are numerous resources available to support this work in You Tube, EdPuzzle, Alison, Saylor.org, etc. OR *Facilities Management: Managing Maintenance for Buildings and Facilities*, by Joel D. Levitt)

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills.

1. Identify the facility's primary production or output
2. Define "mission critical"
3. Identify the mission critical components and processes related to the facility's purpose
4. Describe the structure and management of standard systems, databases, and tools and the related data verification and management.
5. Explain the basic function of all critical infrastructure and systems components (e.g. HVAC, electrical, mechanical, and building automation systems)
6. Summarize the significance of equipment use, care, and testing protocols
7. Describe the importance of assessing, troubleshooting, and maintaining a clean, safe, and secure facility environment
8. Explain the high-level processes and workflow required in the maintenance and operation of equipment and systems and the production of goods and services
9. Explain the basic steps of work order generation and management
10. Describe the difference between standard, emergency, and maintenance operations procedures
11. Explain the basic operation and alarm responses to critical systems
12. State the purpose for the creation, maintenance, and approval of procedure documentation

INSTITUTIONAL OUTCOMES

IO1 **Communication:** Communicate effectively and respectfully using verbal, written, and computer skills

IO3 **Human Relations/Workplace Skills:** Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

COURSE CONTENT OUTLINE

1. Identification of facilities structure and function
2. Define and identify mission critical operations and its components
3. Facilities, infrastructure, equipment operations and management
4. Systems, data bases, and tools usage and management
5. Identifying processes, procedures, workflow, and related documentation
6. Use, care, and testing of systems, machinery, and equipment
7. Work order creation, management, and the related customer management processes, agreements, and protocols
8. Maintaining Building Automation Systems (BAS) and responding to alarms

DEPARTMENTAL GUIDELINES *(optional)*

The cost of books and materials should be held to the minimum cost for the maximum student benefit.

DIVISION CHAIR APPROVAL

DATE