

## Washtenaw Community College Comprehensive Report

### UAT 269 Medical Gas Instructor (UA 4011) Effective Term: Spring/Summer 2021

#### Course Cover

**Division:** Advanced Technologies and Public Service Careers

**Department:** United Association Department

**Discipline:** United Association Training

**Course Number:** 269

**Org Number:** 28200

**Full Course Title:** Medical Gas Instructor (UA 4011)

**Transcript Title:** Medical Gas Instructor UA 4011

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Web Page

**Reason for Submission:** Course Change

**Change Information:**

**Consultation with all departments affected by this course is required.**

**Course title**

**Course description**

**Total Contact Hours**

**Outcomes/Assessment**

**Objectives/Evaluation**

**Rationale:** Update United Association course

**Proposed Start Semester:** Fall 2020

**Course Description:** In this course, students will complete the required training to review, study, and take the National Inspecting Testing and Certification (NITC) ASSE 6050 Medical Gas Instructor certification exam. They will also develop instructional activities that can be used at their local Training Centers. Topics include the National Fire Protection Association (NFPA) 2018 codes and American Society of Safety Engineers (ASSE) Series 6000 standards that govern medical gas and medical/surgical vacuum piping systems. Students will identify installation and testing procedures as well as the qualification requirements of the installer and the brazer in accordance with the American Society of Mechanical Engineers (ASME) Section IX. Qualifying students will prepare to take the NITC ASSE 6050 certification exam at the end of the course. The title of this course was previously Medical Gas. Limited to United Association program participants.

#### Course Credit Hours

**Variable hours:** No

**Credits:** 3

**Lecture Hours: Instructor:** 45 **Student:** 45

**The following Lab fields are not divisible by 15: Student Min, Instructor Min**

**Lab: Instructor:** 3 **Student:** 3

**Clinical: Instructor:** 0 **Student:** 0

**Total Contact Hours: Instructor:** 48 **Student:** 48

**Repeatable for Credit:** NO

**Grading Methods:** Letter Grades

Audit

**Are lectures, labs, or clinicals offered as separate sections?:** NO (same sections)

#### College-Level Reading and Writing

## College-level Reading & Writing

### College-Level Math

#### Requisites

#### General Education

##### Degree Attributes

Below College Level Pre-Reqs

#### Request Course Transfer

##### Proposed For:

### Student Learning Outcomes

1. Identify and define the requirements of the NFPA 99 Code.

#### **Assessment 1**

Assessment Tool: Outcome-related written quiz questions

Assessment Date: Fall 2020

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 80% of the students will score 80% or higher.

Who will score and analyze the data: U.A. instructors

2. Identify and define the requirements for the NITC ASSE 6050 Medical Gas Instructor certification exam.

#### **Assessment 1**

Assessment Tool: Outcome-related written exam questions

Assessment Date: Fall 2020

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 80% of the students will score 80% or higher.

Who will score and analyze the data: U.A. instructors

3. Demonstrate the construction sequence for a medical gas project.

#### **Assessment 1**

Assessment Tool: Skills demonstration

Assessment Date: Fall 2020

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Observational checklist

Standard of success to be used for this assessment: 80% of the students will score 80% or higher.

Who will score and analyze the data: U.A. instructors

4. Prepare and present instructional resources for the Medical Gas Instructor certification exam.

**Assessment 1**

Assessment Tool: Presentation

Assessment Date: Fall 2020

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Observational checklist

Standard of success to be used for this assessment: 80% of the students will score 80% or higher.

Who will score and analyze the data: U.A. instructors

**Course Objectives**

1. Identify how to work with instrument air supply systems, standby header, filters, and piping arrangements.
2. Recognize basic assembly procedures for various vacuum source and gas-powered devices.
3. Review the NFPA 99 Health Care Facilities Code for updates and relevancy.
4. Explain the criteria for health care service levels and systems based on risk to patients, staff and visitors.
5. Discuss potential safety risks in health care facilities including fire, explosions and electricity as well as the personal protective equipment (PPE) needed.
6. Describe the administrative responsibilities of a Medical Gas Instructor.
7. Explain the installation, operation, and maintenance of medical gas and vacuum systems in accordance with ASSE 6000 series.
8. Define medical gas terminology in accordance with the NITC ASSE 6050 exam.
9. Determine system, components and equipment location.
10. Identify the testing equipment and PPE needed when performing system testing.
11. Access and navigate the Blackboard LMS and other available instructional resources.
12. Prepare and present a five-minute instructional activity based on medical gas course material for classroom critique and discussion.
13. List the sequence, process and documentation required for the installation of medical gas piping systems.

**New Resources for Course****Course Textbooks/Resources**

## Textbooks

National Fire Protection Association. *NFPA 99, Health Care Facilities Code*, ed. NFPA, 2018National Fire Protection Association. • *NFPA Medical Gas and Vacuum Systems Handbook*, ed. NFPA, 2018American Society of Safety Engineers . *ASSE 6000 Professional Qualifications Standard*, ed. ASSE, 2018

## Manuals

## Periodicals

## Software

**Equipment/Facilities****Reviewer****Action****Date****Faculty Preparer:***Tony Esposito**Faculty Preparer**Sep 03, 2020***Department Chair/Area Director:***Marilyn Donham**Recommend Approval**Sep 23, 2020***Dean:**

<i>Jimmie Baber</i>	<i>Recommend Approval</i>	<i>Oct 01, 2020</i>
<b>Curriculum Committee Chair:</b>		
<i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Dec 02, 2020</i>
<b>Assessment Committee Chair:</b>		
<i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Dec 04, 2020</i>
<b>Vice President for Instruction:</b>		
<i>Kimberly Hurns</i>	<i>Approve</i>	<i>Dec 07, 2020</i>