

MASTER SYLLABUS

Course Discipline Code & No: UAT269 Title: Medical Gas Effective Term SS08  
 Division Code: VCT Department Code: UASD Org #: 28200  
 Don't publish:  College Catalog  Time Schedule  Web Page

Reason for Submission. Check all that apply.  
 New course approval  Reactivation of inactive course  
 Three-year syllabus review/Assessment report  Inactivation (Submit this page only.)  
 Course change

Change information: Note all changes that are being made. Form applies only to changes noted.

Consultation with all departments affected by this course is required.  Total Contact Hours (total contact hours were: \_\_\_\_\_)  
 Course discipline code & number (was \_\_\_\_\_)\*  Distribution of contact hours (contact hours were: \_\_\_\_\_  
 \*Must submit inactivation form for previous course. lecture: \_\_\_\_\_ lab \_\_\_\_\_ clinical \_\_\_\_\_ other \_\_\_\_\_)  
 Course title (was \_\_\_\_\_)  Pre-requisite, co-requisite, or enrollment restrictions  
 Course description  Change in Grading Method  
 Course objectives (minor changes)  Outcomes/Assessment  
 Credit hours (credits were: \_\_\_\_\_)  Objectives/Evaluation  
 Other \_\_\_\_\_

Rationale for course or course change. Attach course assessment report for existing courses that are being changed.  
 This is an existing course from the United Association Instructor Training Program that is offered through the UA Regional Training System throughout the year. This proposal is to change the current UA course number "468" to "UAT269" to reflect the new WCC identifier for the course. Also, this new identifier will be used on student registration forms and course calendars.  
 Approvals Department and divisional signatures indicate that all departments affected by the course have been consulted.

Department Review by Chairperson  New resources needed  All relevant departments consulted

Print: \_\_\_\_\_ Signature \_\_\_\_\_ Date: \_\_\_\_\_  
 Faculty/Preparer  
 Print: Don Welch Signature D. Welch Date: 12/4/07  
 Department Chair

Division Review by Dean  
 Request for conditional approval  
 Recommendation  Yes  No \_\_\_\_\_  
 Dean's/Administrator's Signature Date

Curriculum Committee Review  
 Recommendation \_\_\_\_\_  
 Tabled  Yes  No Ava Veass \_\_\_\_\_  
 Curriculum Committee Chair's Signature Date 2/5/08

Vice President for Instruction Approval Prager M. Palauz \_\_\_\_\_  
 Vice President's Signature Date 2/11/08

Approval  Yes  No  Conditional

Do not write in shaded area.  
 Log File 10/4/07 Ecopy  Banner 3/18 C&A Database 3/18 C&A Log File 3/18 Basic skills  Contact fee   
 Please return completed form to the Office of Curriculum & Assessment and email an electronic copy to [sjohn@wccnet.edu](mailto:sjohn@wccnet.edu) for posting on the website.

MASTER SYLLABUS

**\*Complete ALL sections which apply to the course, even if changes are not being made.**

|                          |                                     |
|--------------------------|-------------------------------------|
| <b>Course:</b><br>UAT269 | <b>Course title:</b><br>Medical Gas |
|--------------------------|-------------------------------------|

|   |   |            |         |            |          |    |   |      |   |   |           |   |   |            |   |   |        |   |   |                |           |   |  |   |
|---|---|------------|---------|------------|----------|----|---|------|---|---|-----------|---|---|------------|---|---|--------|---|---|----------------|-----------|---|--|---|
| <b>Credit hours:</b> 3<br>If variable credit, give range:<br>_____ to _____ credits | <b>Contact hours per semester:</b><br><table style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center; border-bottom: 1px solid black;">Student</td> <td style="text-align: center; border-bottom: 1px solid black;">Instructor</td> </tr> <tr> <td>Lecture:</td> <td style="text-align: center;">45</td> <td style="text-align: center;">—</td> </tr> <tr> <td>Lab:</td> <td style="text-align: center;">—</td> <td style="text-align: center;">—</td> </tr> <tr> <td>Clinical:</td> <td style="text-align: center;">—</td> <td style="text-align: center;">—</td> </tr> <tr> <td>Practicum:</td> <td style="text-align: center;">—</td> <td style="text-align: center;">—</td> </tr> <tr> <td>Other:</td> <td style="text-align: center;">—</td> <td style="text-align: center;">—</td> </tr> <tr> <td><b>Totals:</b></td> <td style="text-align: center;"><b>45</b></td> <td style="text-align: center;">—</td> </tr> </table> |            | Student | Instructor | Lecture: | 45 | — | Lab: | — | — | Clinical: | — | — | Practicum: | — | — | Other: | — | — | <b>Totals:</b> | <b>45</b> | — | <b>Are lectures, labs, or clinicals offered as separate sections?</b><br><input type="checkbox"/> Yes - lectures, labs, or clinicals are offered in separate sections<br><input checked="" type="checkbox"/> No - lectures, labs, or clinicals are offered in the same section | <b>Grading options:</b><br><input type="checkbox"/> P/NP (limited to clinical & practica)<br><input type="checkbox"/> S/U (for courses numbered below 100)<br><input checked="" type="checkbox"/> Letter grades |
|   | Student   | Instructor |         |            |          |    |   |      |   |   |           |   |   |            |   |   |        |   |   |                |           |   |  |   |
| Lecture:  | 45  | —          |         |            |          |    |   |      |   |   |           |   |   |            |   |   |        |   |   |                |           |   |  |   |
| Lab:  | —   | —          |         |            |          |    |   |      |   |   |           |   |   |            |   |   |        |   |   |                |           |   |  |   |
| Clinical:   | —   | —          |         |            |          |    |   |      |   |   |           |   |   |            |   |   |        |   |   |                |           |   |  |   |
| Practicum:  | —   | —          |         |            |          |    |   |      |   |   |           |   |   |            |   |   |        |   |   |                |           |   |  |   |
| Other:  | —   | —          |         |            |          |    |   |      |   |   |           |   |   |            |   |   |        |   |   |                |           |   |  |   |
| <b>Totals:</b>  | <b>45</b>   | —          |         |            |          |    |   |      |   |   |           |   |   |            |   |   |        |   |   |                |           |   |  |   |

**Prerequisites.** Select one:

- College-level Reading & Writing     
  Reduced Reading/Writing Scores  
(Add information at Level I prerequisite)     
  No Basic Skills Prerequisite  
(College-level Reading and Writing is not required.)

**In addition to Basic Skills in Reading/Writing:**

Level I (enforced in Banner)

| Course   | Grade | Test  | Min. Score | Concurrent Enrollment<br><small>Can be taken together)</small> | Corequisites<br><small>Must be enrolled in this class also during the same semester)</small> |
|--|-------|-------|------------|--|--|
| <input type="checkbox"/> _____                                 | _____ | _____ | _____      | <input type="checkbox"/>                                       | _____  |
| <input type="checkbox"/> and <input type="checkbox"/> or _____ | _____ | _____ | _____      | <input type="checkbox"/>                                       | _____  |
| <input type="checkbox"/> and <input type="checkbox"/> or _____ | _____ | _____ | _____      | <input type="checkbox"/>                                       | _____  |
| <input type="checkbox"/> and <input type="checkbox"/> or _____ | _____ | _____ | _____      | <input type="checkbox"/>                                       | _____  |

Level II (enforced by instructor on first day of class)

| Course   | Grade | Test  | Min. Score |
|--|-------|-------|------------|
| _____  | _____ | _____ | _____      |
| <input type="checkbox"/> and <input type="checkbox"/> or _____ | _____ | _____ | _____      |
| <input type="checkbox"/> and <input type="checkbox"/> or _____ | _____ | _____ | _____      |

**Enrollment restrictions** (In addition to prerequisites, if applicable.)

- and  or Consent required     
  and  or Admission to program required     
  and  or Other (please specify):  
 Program: \_\_\_\_\_

**Please send syllabus for transfer evaluation to:**

Conditionally approved courses are not sent for evaluation.  
 Insert course number and title you wish the course to transfer as.

- E.M.U. as \_\_\_\_\_       \_\_\_\_\_ as \_\_\_\_\_  
 U of M as \_\_\_\_\_       \_\_\_\_\_ as \_\_\_\_\_  
 \_\_\_\_\_ as \_\_\_\_\_       \_\_\_\_\_ as \_\_\_\_\_

MASTER SYLLABUS

|  |  |  |
|--|--|--|
| <p><b>Course</b><br/>UAT269</p>  | <p><b>Course title</b><br/>Medical Gas</p>   |  |
| <p><b>Course description</b><br/>State the purpose and content of the course. Please limit to <u>500</u> characters.</p>   | <p>This course covers methods of teaching about the codes and standards that govern medical gas, medical-surgical vacuum piping systems installation and testing, requirements for installer qualification, and requirements for brazer qualification in accordance with ASME Section IX. A written exam will be administered at the end of the course. General and specific information needed to develop local medical gas training programs throughout the UA will be provided. Limited to United Association program participants.</p>   |  |
| <p><b>Course outcomes</b><br/>List skills and knowledge students will have after taking the course.</p> <p><b>Assessment method</b><br/>Indicate how student achievement in each outcome will be assessed to determine student achievement for purposes of course improvement.</p> | <p><b>Outcomes</b><br/>(applicable in all sections)</p> <ol style="list-style-type: none"> <li>1) Explain to apprentices and journey-people the central concepts and skills of medical gas.</li> <li>2) Demonstrate to apprentices and journey-people the proper maintenance and repair procedures related to teaching medical gas.</li> <li>3) Utilize approved industry and UA course/training materials to teach medical gas.</li> </ol>  | <p><b>Assessment</b><br/>Methods for determining course effectiveness</p> <hr/> <p>Survey of UA training coordinators/supervisors.</p> <p>Survey of UA training coordinators/supervisors.</p> <p>Survey of UA training coordinators/supervisors.</p>   |
| <p><b>Course Objectives</b><br/>Indicate the objectives that support the course outcomes given above.</p> <p><b>Course Evaluations</b><br/>Indicate how instructors will determine the degree to which each objective is met for each student.</p>                                 | <p><b>Objectives</b><br/>(applicable in all sections)</p> <hr/> <p>Outcome 1:</p> <ul style="list-style-type: none"> <li>- Identify how to work with instrument air supply systems, standby header, filters, and piping arrangements.</li> <li>- Identify the components and features of different equipments, such as typical cylinder supply system and medical air compression system.</li> </ul> <p>Outcome 2:</p> <ul style="list-style-type: none"> <li>- Locate and shut off valves, pressure switches, and piping for medical gas systems.</li> <li>- Recognize basic assembly procedures for various vacuum source and gas-powered devices.</li> </ul> <p>Outcome 3:</p> <ul style="list-style-type: none"> <li>- Demonstrate appropriate use and knowledge of course materials.</li> </ul> | <p><b>Evaluation</b><br/>Methods for determining level of student performance of objectives</p> <hr/> <p>Exam consisting of multiple choice, true/false, fill in the blank, and short answer questions.</p> <p>Exam consisting of multiple choice, true/false, fill in the blank, and short answer questions.</p> <p>Presentation and demonstration of learned course materials.</p> <p>Presentation and demonstration of learned course materials.</p> <p>Presentation and demonstration of learned course materials.</p> |

MASTER SYLLABUS

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

List all new resources needed for course, including library materials.

**Student Materials:**

|  |   |   |
|--|---|---|
| <p><b>List examples of types</b></p> <ul style="list-style-type: none"> <li>Texts</li> <li>Supplemental reading</li> <li>Supplies</li> <li>Uniforms</li> <li>Equipment</li> <li>Tools</li> <li>Software</li> </ul> | <p>All course materials will be provided.</p> | <p><b>Estimated costs</b></p> <p>\$</p> |
|--|---|---|

**Equipment/Facilities:** Check all that apply. (All classrooms have overhead projectors and permanent screens.)

|  |  |
|--|--|
| <p>Check level <u>only</u> if the specified equipment is needed for <u>all</u> sections of a course.</p> <p><input type="checkbox"/> Level I classroom<br/>Permanent screen &amp; overhead projector</p> <p><input type="checkbox"/> Level II classroom<br/>Level I equipment plus TV/VCR</p> <p><input checked="" type="checkbox"/> Level III classroom<br/>Level II equipment plus data projector, computer, faculty workstation</p> | <p><input type="checkbox"/> Off-Campus Sites</p> <p><input type="checkbox"/> Testing Center</p> <p><input type="checkbox"/> Computer workstations/lab</p> <p><input type="checkbox"/> ITV</p> <p><input type="checkbox"/> TV/VCR</p> <p><input type="checkbox"/> Data projector/computer</p> <p><input type="checkbox"/> Other _____</p> |
|--|--|

**Assessment plan:**

| Learning outcomes to be assessed (list from Page 3)   | Assessment tool                                 | When assessment will take place (semester & year)                                   | Course section(s)/other population | Number students to be assessed   |
|---|---|---|------------------------------------|--|
| Explain to apprentices and journey-people the central concepts and skills of medical gas.             | Survey of UA training coordinators/supervisors. | Spring 2009 for students enrolled in Summer 2008, and every three years thereafter. | All                                | 75% of all students through random sampling who teach the topic the subsequent year, and minimum of 20 students. |
| Demonstrate to apprentices and journey-people the proper maintenance and repair procedures related to | Survey of UA training coordinators/supervisors. | Spring 2009 for students enrolled in Summer 2008, and every three years thereafter. | All                                | 75% of all students through random sampling who teach the topic the subsequent year, and minimum of 20           |

MASTER SYLLABUS

|  |  |  |            |  |
|--|--|--|------------|--|
| <p>teaching medical gas.</p> <p>Utilize approved industry and UA course/training materials to teach medical gas.</p> | <p>Survey of UA training coordinators/supervisors.</p> | <p>Spring 2009 for students enrolled in Summer 2008, and every three years thereafter.</p> | <p>All</p> | <p>students.</p> <p>75% of all students through random sampling who teach the topic the subsequent year, and minimum of 20 students.</p> |
|--|--|--|------------|--|

**Scoring and analysis of assessment:**

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric/scoring guide.

Students' training activities will be scored and evaluated on the survey questionnaires (see attached) of each of the three learning outcomes.

2. Indicate the standard of success to be used for this assessment.

Based on the number of students who teach the learned materials in the subsequent year, 75% of them will score an average of satisfactorily or above on the survey questionnaires to be completed by UA training coordinators/supervisors.

3. Indicate who will score and analyze the data (data must be blind-scored).

The UA Program Administrator will coordinate with UA training coordinators and the training department about the implementation of the assessment plan and the collection of data from UAT faculty, and will discuss the results with UAT faculty.

4. Explain the process for using assessment data to improve the course.

The assessment will be shared with the appropriate UA training coordinators, training department, and UAT faculty. The UA Program Administrator will solicit suggestions for improving the results and will work with UA training coordinators, the training department, and UAT faculty to make needed changes to improve course content and student performance.