

MASTER SYLLABUS

Course Discipline Code & No: UAE146 Title: Air Conditioning Effective Term SS 2009  
 Division Code: VCT Department Code: UA Org #: 28310  
 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.

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

Rationale for course or course change. Attach course assessment report for existing courses that are being changed.

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: Dan Welch Faculty/Preparer Signature: D. Welch Date: 2/2/09  
 Print: \_\_\_\_\_ Department Chair Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Division Review by Dean  
 Request for conditional approval  
 Recommendation  Yes  No D. Welch Date: 2/2/09  
 Dean's/Administrator's Signature

Curriculum Committee Review  
 Recommendation  Tabled  Yes  No Swakowsky Date: 3/18/09  
 Curriculum Committee Chair's Signature

Vice President for Instruction Approval  
Ray M. Palocz Date: 3/12/09  
 Vice President's Signature  
 Approval  Yes  No  Conditional

Do not write in shaded area.  
 Log File 2/18/09 Copy  Banner 3/19 C&A Database 3/19 C&A Log File 3/19 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.

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

Course: <u>UAE146</u>	Course title: <u>Air Conditioning</u>
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<b>Credit hours:</b> <u>2</u> If variable credit, give range: _____ to _____ credits	<b>Contact hours per semester:</b> <table style="width:100%"> <tr> <td></td> <td style="text-align:center"><u>Student</u></td> <td style="text-align:center"><u>Instructor</u></td> </tr> <tr> <td>Lecture:</td> <td style="text-align:center"><u>30</u></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"><u>30</u></td> <td style="text-align:center">___</td> </tr> </table>		<u>Student</u>	<u>Instructor</u>	Lecture:	<u>30</u>	___	Lab:	___	___	Clinical:	___	___	Practicum:	___	___	Other:	___	___	<b>Totals:</b>	<u>30</u>	___	<b>Are lectures, labs, or clinicals offered as separate sections?</b> <input type="checkbox"/> Yes - lectures, labs, or clinicals are offered in separate sections <input type="checkbox"/> No - lectures, labs, or clinicals are offered in the same section	<b>Grading options:</b> <input type="checkbox"/> P/NP (limited to clinical & practica) <input type="checkbox"/> S/U (for courses numbered below 100) <input checked="" type="checkbox"/> Letter grades
	<u>Student</u>	<u>Instructor</u>																						
Lecture:	<u>30</u>	___																						
Lab:	___	___																						
Clinical:	___	___																						
Practicum:	___	___																						
Other:	___	___																						
<b>Totals:</b>	<u>30</u>	___																						

**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 <small>Can be taken together)</small>	Corequisites <small>Must be enrolled in this class also during the same semester)</small>
<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"/>	_____
<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: UA apprenticeship

**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.

<input type="checkbox"/> E.M.U. as _____	<input type="checkbox"/> _____ as _____
<input type="checkbox"/> U of M as _____	<input type="checkbox"/> _____ as _____
<input type="checkbox"/> _____ as _____	<input type="checkbox"/> _____ as _____

MASTER SYLLABUS

<p>Course <u>UAE146</u></p>	<p>Course title: <u>Air Conditioning</u></p>	
<p><b>Course description</b> State the purpose and content of the course. Please limit to <u>500</u> characters.</p>	<p>This course covers air conditioning systems, installation, and service. Topics include: psychrometric properties of air, building heating and cooling load calculations, control applications, energy conservation and heat recovery, in addition to a review of basic science.</p> <p>This course is taught at United Association (UA) Training Centers throughout the United States and Canada. Enrollment is limited to apprentices accepted in to a UA training program.</p>	
<p><b>Course outcomes</b> List skills and knowledge students will have after taking the course.</p> <p><b>Assessment method</b> Indicate how student achievement in each outcome will be assessed to determine student achievement for purposes of course improvement.</p>	<p><b>Outcomes</b> (applicable in all sections)</p> <p>After the successful completion of this course the student will able to:</p> <ul style="list-style-type: none"> <li>• Demonstrate piping operations typically performed by the air-conditioning technician</li> <li>• Properly leak test, evacuate, and charge an air-conditioning system</li> <li>• Perform basic service and maintenance activities of AC systems</li> </ul>	<p><b>Assessment</b> Methods for determining course effectiveness</p> <p>This course is assessed externally by the local's Joint Apprenticeship Training Committee (JATC), consisting of industry representatives and UA members. The local receives feedback on needed technical updates and apprentice skill performance.</p>
<p><b>Course Objectives</b> Indicate the objectives that support the course outcomes given above.</p> <p><b>Course Evaluations</b> Indicate how instructors will determine the degree to which each objective is met for each student.</p>	<p><b>Objectives</b> (applicable in all sections)</p> <p>Objectives and evaluation methods follow the International Pipe Trades Curriculum Outline issued by the UA Training Department.</p>	<p><b>Evaluation</b> Methods for determining level of student performance of objectives</p>

List all new resources needed for course, including library materials.  
 No new resources, courses are taught at existing UA local training schools.

UAE146

**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>UA local training schools provide all the necessary books and materials for the students.</p>	<p><b>Estimated costs</b></p> <p>\$ 0</p>
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**Equipment/Facilities:** Check all that apply. (All classrooms have overhead projectors and permanent screens.)

Check level only if the specified equipment is needed for all sections of a course.

<input type="checkbox"/> Level I classroom Permanent screen & overhead projector	<input type="checkbox"/> Off-Campus Sites
<input type="checkbox"/> Level II classroom Level I equipment plus TV/VCR	<input type="checkbox"/> Testing Center
<input type="checkbox"/> Level III classroom Level II equipment plus data projector, computer, faculty workstation	<input type="checkbox"/> Computer workstations/lab
	<input type="checkbox"/> ITV
	<input type="checkbox"/> TV/VCR
	<input type="checkbox"/> Data projector/computer
	<input checked="" type="checkbox"/> Other <u>Taught at UA Local schools</u>

**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
<ul style="list-style-type: none"> <li>• Demonstrate piping operations typically performed by the air-conditioning technician</li> <li>• Properly leak test, evacuate, and charge an air-conditioning system</li> <li>• Perform basic service and maintenance activities of AC systems</li> </ul>	<p>Contractors (employer) provide paper feedback forms for apprentice skill performance reviews.</p> <p>JATC contractor members provide specifications detailing technical updates.</p>	<p>WCC will prepare a summary report on assessment activities in Winter 2010 and every three years thereafter.</p>	<p>All</p>	<p>All</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.

Individual locals use apprentice feedback forms filled out by the employing contractor.

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

The standard of success is set by the local JATC.

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

The data is analyzed by the JATC as a committee.

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

Results are initially shared with the training coordinator for the local. The training coordinator then works with appropriate instructor staff to make needed changes.