

MASTER SYLLABUS

Course Discipline Code & No: UAE154 Title: Adv. Air Conditioning and Refrigeration 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.

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.

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 Signature D. Welch Date: 2/2/09
 Faculty/Preparer
 Print: _____ Signature _____ Date: _____
 Department Chair

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

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

Vice President for Instruction Approval
Roger M. Palmy 3/19/09
 Vice President's Signature Date
 Approval Yes No Conditional

Do not write in shaded area.
 Log File 2/18/09 Ecopy 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 for posting on the website.

<p>Course <u>UAE154</u></p>	<p>Course title: <u>Adv. Air Conditioning and Refrigeration</u></p>	
<p>Course description State the purpose and content of the course. Please limit to <u>500</u> characters.</p>	<p>This course presents special topics in air conditioning and refrigeration. Topics may include introduction to building automation, load calculations, duct sizing, Universal CFC certification, and air distribution.</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>Course outcomes List skills and knowledge students will have after taking the course.</p> <p>Assessment method Indicate how student achievement in each outcome will be assessed to determine student achievement for purposes of course improvement.</p>	<p>Outcomes (applicable in all sections)</p> <hr/> <p>After successful completion of this course the student will be able to:</p> <ul style="list-style-type: none"> • Describe the motors commonly found on air-conditioning systems • List and describe controls commonly found on air-conditioning systems • Properly install an air-conditioning system and put it into operation • Troubleshoot electrical problems in an air-conditioning system • Troubleshoot mechanical problems in an air-conditioning system • Explain the operation of a heat pump system • Troubleshoot electrical and mechanical problems in heat pump systems 	<p>Assessment Methods for determining course effectiveness</p> <hr/> <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>Course Objectives Indicate the objectives that support the course outcomes given above.</p> <p>Course Evaluations Indicate how instructors will determine the degree to which each objective is met for each student.</p>	<p>Objectives (applicable in all sections)</p> <hr/> <p>Objectives and evaluation methods follow the International Pipe Trades Curriculum Outline issued by the UA Training Department.</p>	<p>Evaluation Methods for determining level of student performance of objectives</p>

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

Student Materials:

List examples of types	UA local training schools provide all the necessary books and materials for the students.	Estimated costs
Texts Supplemental reading Supplies Uniforms Equipment Tools Software		\$ 0

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"/> Level II classroom Level I equipment plus TV/VCR <input type="checkbox"/> Level III classroom Level II equipment plus data projector, computer, faculty workstation	<input type="checkbox"/> Off-Campus Sites <input type="checkbox"/> Testing Center <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>
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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"> • Describe the motors commonly found on air-conditioning systems • List and describe controls commonly found on air-conditioning systems • Properly install an air-conditioning system and put it into operation • Troubleshoot electrical problems in an air-conditioning system • Troubleshoot mechanical 	Contractors (employer) provide paper feedback forms for apprentice skill performance reviews. JATC contractor members provide specifications detailing technical updates.	WCC will prepare a summary report on assessment activities in Winter 2010 and every three years thereafter.	All	All

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<p>problems in an air-conditioning system</p> <ul style="list-style-type: none"> • Explain the operation of a heat pump system • Troubleshoot electrical and mechanical problems in heat pump systems 				

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.