

MASTER SYLLABUS

Course Discipline Code & No: UAT220 Title: Pipe Trades Applied Mathematics 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.

<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.  
 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 "164" to "UAT220" 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: Dan Welch Signature D. Welch Date: 12/3/07  
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 K. Krasny \_\_\_\_\_  
Curriculum Committee Chair's Signature Date 1/29/08

Vice President for Instruction Approval  
Roger M. Palay \_\_\_\_\_  
Vice President's Signature Date 1/30/08

Approval  Yes  No  Conditional

Do not write in shaded area.  
 Log File 1/19/07 Ecopy  Banner 2/13 C&A Database 2/13 C&A Log File 2/13 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.**

<b>Course:</b> UAT220	<b>Course title:</b> Pipe Trades Applied Mathematics
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<b>Credit hours:</b> <u>1.5</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>12</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"><u>10.5</u></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>22.5</u></td> <td style="text-align:center">___</td> </tr> </table>		<u>Student</u>	<u>Instructor</u>	Lecture:	<u>12</u>	___	Lab:	___	___	Clinical:	___	___	Practicum:	<u>10.5</u>	___	Other:	___	___	<b>Totals:</b>	<u>22.5</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 checked="" 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>12</u>	___																						
Lab:	___	___																						
Clinical:	___	___																						
Practicum:	<u>10.5</u>	___																						
Other:	___	___																						
<b>Totals:</b>	<u>22.5</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"/>	_____
<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.

<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 _____

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<p><b>Course</b> UAT220</p>	<p><b>Course title</b> Pipe Trades Applied Mathematics</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 methods of teaching about pipe trades applied mathematics. Topics to be covered include: teaching styles and methods, creating exam questions, and applying mathematics to the plumbing and pipefitting industry. There will be a refresher on some important math functions, such as offsets, metric systems, and calculator usage. On the final day of class students will be required to demonstrate a basic math lesson to the class. Limited to United Association program participants.</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>1) Explain to apprentices and journey-people the central concepts and skills of pipe trades applied mathematics.</p> <p>2) Utilize approved industry and UA course/training materials to teach pipe trades applied mathematics.</p>	<p><b>Assessment</b> Methods for determining course effectiveness</p> <p>Survey of UA training coordinators/supervisors.</p> <p>Survey of UA training coordinators/supervisors.</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>Outcome 1: - Identify the six-step method of trade teaching.</p> <p>- Recognize the features of good lesson plans and elements of effective teaching styles.</p> <p>Outcome 2: - Demonstrate appropriate use and knowledge of course materials.</p>	<p><b>Evaluation</b> Methods for determining level of student performance of objectives</p> <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>

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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>
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**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 Permanent screen &amp; overhead projector</p> <p><input type="checkbox"/> Level II classroom Level I equipment plus TV/VCR</p> <p><input checked="" type="checkbox"/> Level III classroom 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>
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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
Explain to apprentices and journey-people the central concepts and skills of pipe trades applied mathematics.	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 7 students.
Utilize approved industry and UA course/training materials to teach pipe trades applied mathematics.	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 7

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				students.
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**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.