

MASTER SYLLABUS

Course Discipline Code & No: APP 113 Title: Math for Pipe Trades Effective Term 200605
 Division Code: VCT Department Code: UA Org #: 18200
 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: lecture: _____ lab _____ clinical _____ other _____)
 *Must submit inactivation form for previous course. Pre-requisite, co-requisite, or enrollment restrictions
 Course title (was Math & Science: Plumbers/Pipe) Change in Grading Method
 Course description Outcomes/Assessment
 Course objectives (minor changes) Objectives/Evaluation
 Credit hours (credits were: _____) Other _____

Rationale for course or course change. Attach course assessment report for existing courses that are being changed.
 This course covers all 4 UA trade math credits. (Plumbing, Pipefitting, Sprinkler Fitting, and HVACR) We need to change the title to reflect this.

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: Mike Griffith Faculty/Preparer Signature [Signature] Date: 3/12/07
 Print: Dan Welch Department Chair Signature [Signature] Date: 3/12/07

Division Review by Dean
 Request for conditional approval
 Recommendation Yes No [Signature] Date 3/12/07
 Dean's/Administrator's Signature

Curriculum Committee Review
 Recommendation Tabled Yes No [Signature] Date 5/21/07
 Curriculum Committee Chair's Signature

Vice President for Instruction Approval
[Signature] Date 5/21/07
 Vice President's Signature
 Approval Yes No Conditional

Do not write in shaded area.
 Log File 8/13/07 Copy Banner 5/30 C&A Database 5/30 C&A Log File 5/30 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.

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For help screens press F1.

SECTION III. COURSE SYLLABUS

A. COURSE DETAILS (Start with #1.)

Discipline & No.: APP 113 **Title:** Math and Science

Course and title will automatically appear above upon saving or previewing

1. Description: (Please be brief. Explain acronyms if used.)

The basic knowledge of math and science that pertains to our industry.

↑
Students will learn

2. Credit Hours: 03 If Variable credit, Give Range: _____ to _____ credits If repeatable for credit, how many times _____	3. Contact Hours per Semester: Lecture: 30 Lab: 30 Clinical: _____ Other: _____ Total Contact Hours: 60	4. Class Capacity: _____ (If nonstandard, attach Class Capacity Exception form.)	5. Course Options: <input type="checkbox"/> Distance learning (Attach DL Form) <input type="checkbox"/> Honors (Attach Honors Addendum.) <input type="checkbox"/> P/NP Grading
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6. Prerequisite(s) and/or “(“	Course	Min Grade	*Concurrent Enrollment	Test Name	Min. Score	**Level “)”	I II	Other Prerequisites
<input type="checkbox"/>	APP 111	_____	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	APP 112	_____	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	_____	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	_____

* Can take prerequisite before or concurrently with this course.
 **Level I is enforced in Banner; Level II is enforced by instructor on 1st day of class.

8. Course Purpose: <input checked="" type="checkbox"/> Program Requirement <input type="checkbox"/> General Education <input type="checkbox"/> Program Support <input type="checkbox"/> Basic Skills/Developmental <input type="checkbox"/> Transfer <input type="checkbox"/> Industry/Professional Dev <input type="checkbox"/> Enrichment	If a program requirement, specify the program(s) <u>Local 190 apprenticeship program</u> _____ _____	Please send syllabus for Transfer evaluation to: <input type="checkbox"/> EMU <input type="checkbox"/> UM _____ _____	Accepted for transfer: (attach documentation) <input type="checkbox"/> EMU <input type="checkbox"/> UM _____ _____
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9. Terms Course will be offered:		Day	Eve	Even years only	Odd years only
Terms	Session Length (c.g. 15 weeks, 1 st 7½ weeks, etc.)				
<input checked="" type="checkbox"/> Fall	15 weeks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Winter	15 weeks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Spr/Summer	15 weeks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B. MAJOR INSTRUCTIONAL UNITS A major instructional unit is a grouping of topics that naturally relate to one another. Add additional numbers as needed. (This section is unprotected so that you can cut and paste from other documents.)

1. Math and Science

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C. INSTRUCTIONAL OBJECTIVES

DIRECTIONS: Use student outcomes-based language. (Example: Upon visiting a gravel pit students will observe, analyze and describe in one page the weathering processes.) Units should match those listed in Section B.

(This section is unprotected. You may cut and paste from other documents as needed.)

Unit #1 Math and Science

The student will:

1. Demonstrate the basic math formulas for performing work in the industry
2. Describe basic math knowledge
3. List facts, ideas, and skills in science
4. Perform basic computation dealing with numbers and measurements
5. Describe Pipe Measurements I
6. Describe the properties of water, hydraulics and pneumatics
7. Differentiate among mechanics, metals, alloys, synthetics, and corrosion
8. Demonstrate Basic Drawing and Blueprint Reading

D. INSTRUCTIONAL METHODS, EVALUATION CRITERIA, AND ASSESSMENT

1. Instructional Methods: (Check the appropriate boxes and describe as needed.)

<input checked="" type="checkbox"/> Lecture/Discussion _____	<input type="checkbox"/> Performances _____
<input type="checkbox"/> Clinical Instruction _____	<input type="checkbox"/> Group Critiques _____
<input checked="" type="checkbox"/> Laboratory Assignments _____	<input type="checkbox"/> Field Trips _____
<input type="checkbox"/> Internet Assignments _____	<input type="checkbox"/> Telecourse _____
<input type="checkbox"/> Computer Simulations _____	<input type="checkbox"/> ITV Course _____
<input type="checkbox"/> On-Site Work Experience _____	<input type="checkbox"/> Self-Paced Instruction _____
<input type="checkbox"/> Team Assignments _____	<input checked="" type="checkbox"/> Other Seminar _____
<input type="checkbox"/> Demonstrations _____	<input type="checkbox"/> Other _____

2. Evaluation Criteria:

<input checked="" type="checkbox"/> Attendance _____	<input checked="" type="checkbox"/> Quizzes _____
<input checked="" type="checkbox"/> Class Discussion _____	<input checked="" type="checkbox"/> Tests _____
<input checked="" type="checkbox"/> Papers _____	<input type="checkbox"/> Midterm _____
<input type="checkbox"/> Portfolios _____	<input checked="" type="checkbox"/> Final Exam _____
<input type="checkbox"/> Projects _____	<input type="checkbox"/> Presentations _____
<input type="checkbox"/> Reports _____	<input type="checkbox"/> Individual Performance _____
<input type="checkbox"/> Clinical Assignments _____	<input type="checkbox"/> Group/Team Performance _____
<input checked="" type="checkbox"/> Home Work _____	<input type="checkbox"/> Other _____

3. Assessment of Student Achievement: (Indicate methods that will be used for NCA mandated assessment of student academic achievement at the course and (if applicable) general education levels)

<input type="checkbox"/> Departmental Exam _____	<input checked="" type="checkbox"/> Pre-test/Post-test _____
<input type="checkbox"/> Follow-on Tracking _____	<input type="checkbox"/> Simulations _____
<input type="checkbox"/> Standardized Test _____	<input type="checkbox"/> Comprehensive Project _____
<input type="checkbox"/> Portfolio Assessment _____	<input type="checkbox"/> Other _____

F. EQUIPMENT, FACILITIES, TEXTS, MATERIALS, AND SUPPLIES

1. Special Equipment/Facilities : (Check the appropriate boxes and describe as needed.)

<input checked="" type="checkbox"/> Lab equipment _____	<input type="checkbox"/> ITV Classroom _____
<input checked="" type="checkbox"/> Computer Lab _____	<input type="checkbox"/> Off-Campus Sites _____
<input checked="" type="checkbox"/> CD ROM's _____	<input type="checkbox"/> Testing Center _____
<input checked="" type="checkbox"/> Data Projector/Screen _____	<input checked="" type="checkbox"/> Other Supplied by Local 190 _____
<input checked="" type="checkbox"/> VCR _____	<input type="checkbox"/> Other _____
<input checked="" type="checkbox"/> TV Monitor _____	<input type="checkbox"/> Other _____

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2. Texts: (Please indicate if no text is required.)

Title: UA materials supplied by Local 190

Author: United Association

Copyright Yr: _____

Publisher: _____

Est. Cost: _____

Title: _____

Author: _____

Copyright Yr: _____

Publisher: _____

Est. Cost: _____

Title: _____

Author: _____

Copyright Yr: _____

Publisher: _____

Est. Cost: _____

Title: _____

Author: _____

Copyright Yr: _____

Publisher: _____

Est. Cost: _____

Additional Texts:

3. Supplies and/or Uniforms students will have to Acquire: (e.g. calculators, uniforms, tools, etc.)

Descriptions

Cost Estimates

4. Reference Materials that will be used: (e.g. journals, books, manuals, maps, LRC reserves, etc.)

Title/Name

Location

5. Computer Software that will be used:

Title/Name

Location

6. Audio/Visual Materials that will be used: (e.g. films, video tapes, slides, audio tapes, CDs, etc.)

Title/Name

Location

