WEL110 Print Reading/Math I Syllabus

Course Information

Credits 1  
Campus Washburn Institute of Technology  
Address 5724 SW Huntoon  
City/State/Zip Topeka, Kansas 66604  
Office Fax 785-273-7080  

Description
This course is designed to teach a basic understanding of welder’s math and the symbols used on blueprints. The symbols used on prints give the designer a way to relay information to the fitter and welder. The graphic language on prints uses various symbols, lines, and notes to convey information. A blueprint is used by a welder to visualize the parts final form, to position and align various members, and to determine the type of joint preparation. It tells the welder what type of filler metal to use, where the weld metal is to be placed, the extent of welding and the size, contour, and finish method for the welds.

Textbooks
Blueprint Reading for Welders and Fitters – EW459  
Pipe Layout for Fitters and Welders – EW517 (optional)

Student Learning Outcomes:
A. Communicate effectively  
B. Integrate technology  
C. Learn effectively  
D. Demonstrate cooperative teamwork skills  
E. Apply safety in the workplace  
F. Think critically and creatively  
G. Demonstrate responsible work ethics

Competencies
1. Demonstrate proper use of tape measure.  
2. Demonstrate understanding of adding and subtracting fractions as it relates to welding.  
3. Demonstrate understanding of adding and subtracting decimals as it relates to welding.  
4. Demonstrate understanding of metric system as it relates to welding.  
5. Interpret blueprint symbols.  
6. Interpret drawing lines  
7. Analyze blueprint drawing as it relates to welding.
Guidelines for Success

Assessment Plan
Assessment is an integral part of the educational process at Washburn Tech and accurate feedback is an important tool in continuously improving the institution’s technical programs. Students can expect to participate in assessment activities prior to entry into programs, within specific courses and following program completion for specific fields of study.

Grading Rationale and Grading Scale

<table>
<thead>
<tr>
<th>Rating Scale</th>
<th>Description</th>
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<tbody>
<tr>
<td>4</td>
<td>Skilled – can perform task with no additional training</td>
</tr>
<tr>
<td>3</td>
<td>Moderately skilled – has performed task during training program; limited additional training may be required</td>
</tr>
<tr>
<td>2</td>
<td>Limited Skill – has performed task during training program; additional training is required to develop skill</td>
</tr>
<tr>
<td>1</td>
<td>Exposed to content – is familiar with process; no opportunity to develop skill</td>
</tr>
<tr>
<td>0</td>
<td>No Exposure – not covered</td>
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</tbody>
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**Directions:** Evaluate the student by checking the appropriate number to indicate the degree of competency reached. Rate each task to reflect employability readiness.

Attendance
Attendance is required.

Disability
The Special Support Services (SSS) Office is responsible for assisting in arranging accommodations and for identifying resources at Washburn Institute of Technology for persons with disabilities. Qualified students with disabilities MUST register and provide documentation with the office to be eligible for services. New requests for accommodations should be submitted two months or more prior to the date services should begin; however, contact the SSS Office as soon as a need may arise. Depending on the accommodation request, four to eight week lead time may be needed for timely and effective provision of services. SSS coordinates and assist in arranging services it deems appropriate of eligible students on a case-by-case basis.

If you are a student with a disability that may substantially limit your ability to participate in this class and believe you will need accommodations, it is your responsibility to contact:

Special Support Services Coordinator
Phone: 785-228-6356
E-Mail: ssscoordinator@washburn.edu