

<b>Course:</b> Carpentry	<b>Grade:</b> 9-12
<b>Instructor:</b>	<b>CIP Code:</b> 460201
<b>Unit:</b> Unit 3	<b>Title:</b> Footing and Foundation Forms
<p><b>Knowledge, Content and Skills:</b> Describe the composition of concrete, explain reasons for reinforcing rods, explain reasons for a slump test, explain proper placement techniques, construct forms, and estimate amounts of concrete needed for a given project.</p>	
<p><b>Performance objective:</b> Use levels, batter boards and string to layout and build a footing form ready to pour. Setup Concrete panels for a foundation wall.</p>	
<p><b>Competency:</b> 3. Demonstrate use of appropriate personal safety equipment and proper use of emergency equipment. 9. Demonstrate proper safety and use of hand tools. 10. Demonstrate proper use and safety of common power tools. 12. Explain term associated with footings and foundations and identify the use of footings, foundations and flatwork. 13. Recognize elements and symbols of blueprints and drawings.</p>	
<p><b>Common Core:</b> Listening: Students will demonstrate the ability to listen and view critically for variety of purposes. Reading Informational Texts Competency: Students will demonstrate the ability to comprehend, analyze and critique a variety of increasingly complex print and non-print informational texts.</p>	
<p><b>Tools, supplies and reference materials:</b> Builder's level, transit, batter boards, string, crowbar, sledge hammer, skill saw, duplex nails, footing/foundation panels, Career Connections Project Book 3 Residential pages: 94-115.</p>	
<p><b>Methods of instruction:</b> Demonstration on how to use the levels and build a form. Lecture on materials from text. Field trip to a jobsite or the Union Training Hall to see the task performed by professional carpenters.</p>	
<p><b>Task analysis or activities:</b> Given a wall line referenced from batter boards, students will setup a dry string line as a guide, then construct a footing form with spreaders and stakes and level the form using a laser level or transit. Prepare the site to pour concrete.</p>	
<p><b>Evaluation:</b> Students will be graded on their use of time, safety methods, quality of work, cleaning and organization of their work area, interaction with other students, and employability skills.</p>	
<p><b>Instructors Notes:</b></p>	