



**Schuylkill Technology Center  
Unit Plan**

**FLOOR CONSTRUCTION**

<b>Course Title:</b> Carpentry	<b>CIP Code:</b> 46.0201	<b>Grade/Level:</b> 10 <sup>th</sup> -11 <sup>th</sup> Level 2
<b>Instructor:</b> Mr. Phil Kintzel		<b>Timeline:</b> (# of school days) School Days
<p><b>Objectives:</b></p> <p>Describe platform, balloon, and post-and-beam framing, and identify framing members of each.          Describe several energy and material conservation framing methods.          Build and install girders, erect columns, and lay out sills.          Lay out and install floor joists.          Frame openings in floors.          Lay out, cut, and install bridging.          Apply subflooring.          Describe methods to prevent destruction by wood pests.</p>		
<p><b>PA Core Standards:</b> (List <u>ALL</u> standards you will address during this unit.)</p> <p>Math:</p> <p>CC.2.1.HS.F.1          Apply and extend the properties of exponents to solve problems with rational exponents.          A1.1.1.1.1, A1.1.1.1.2, A1.1.1.3.1, A2.1.2.1.1, A2.1.2.1.2, A2.1.2.1.3, A2.1.2.1.4</p> <p>CC.2.1.HS.F.2          Apply properties of rational and irrational numbers to solve real world or mathematical problems.          A1.1.1.1.1, A1.1.1.1.2, A1.1.1.3.1</p> <p>CC.2.1.HS.F.3          Interpret the structure of expressions to represent a quantity in terms of its context.          A1.1.1.5.1, A1.1.1.5.2, A1.1.1.5.3, A2.1.2.2.1, A2.1.2.2.2</p>		
<p><b>POS Duty/Task Numbers:</b> (List <u>ALL</u> Tasks you will teach and assess during this unit.)</p> <p>700    FRAMING - FLOOR CONSTRUCTION</p> <p>701    Determine methods used to fasten sill plates.          702    Properly install fasteners used in floor framing.          703    Properly measure and install sill plates.          704    Properly measure and install floor joists, including manufactured floor joists.          705    Properly measure and install joists for a cantilever floor.          706    Properly layout and construct cross and solid bridging.          707    Properly layout and install sub-flooring.          708    Properly measure and frame floor openings.</p>		

**Instructional Procedures and Strategies:** (Include all learning guides, strategies (MAX and other), procedures, etc. that will be used during this unit.)

Learning Guides:

700-1 Floor Construction

Theory in the classroom

Stump the Teacher (MAX)

Demonstrations by the instructor

Guided Practice

**Resources:** (List all equipment and supplies necessary to complete the unit)

Appropriate Module

Pencil

Notebook Paper

Textbook (Basic Principles for Construction)

Carpenter Shop or Job Site

Appropriate Job-Sheets Packet

Performance Assessment Packet

Foundation

Treated 2x6

2x10 material

1x3 material

8d nails

16d nails

Portable Power Tools

**Differentiation/Accommodations:**

Students who are in need of accommodations will receive the following:

Presentation accommodations

Setting accommodations

Response accommodations

Timing/Scheduling accommodations

**Assessments:** (Formative and Summative)

Both graded and non-graded job assignments relating to the mastery of the POS tasks

KWL literacy assignments

Written unit test

Performance assessments to rate the students' competency of the POS tasks