

**COURSE OUTLINE****Course:** 70316 MASONRY - LEVEL II**Total Course Hours:** 720.00**CBEDS Title:** Brick, Block and Stonemasonry**CBEDS #:** 5505**Job Title(s):**

Brick Mason, Cement Mason, Bricklayer, Stone Mason

**Prerequisites:****Course Description:**

Masonry is an introduction into the field of masonry which prepares students for entry level positions. The class is an overview of the masonry trade including the history and origin of masonry construction, tools and equipment, safety, basic fundamentals of mortar preparation and application, and the use of various masonry products. Block masons build walls, partitions, arches, fireplaces, chimneys, and other structures. Integrated throughout the course are Academic and CTE standards, which include safety, communication, technology, ethics, career planning and other employability skills.

Hours	
Class	OJT

**Occupational Competencies**

1-7 on the Course Outline are generic to all BVROP courses and include the BVROP Student Outcomes

3.00	3.00	1	<b><u>ORIENTATION</u></b>	<ul style="list-style-type: none"> <li>A Identifies and discusses course objectives and competencies.</li> <li>B Discusses ROP Student Outcomes.</li> <li>C Explains class attendance and behavior objectives.</li> <li>D Discusses job opportunities.</li> </ul>
3.00	3.00	2	<b><u>HEALTH, SAFETY AND ENVIRONMENTAL MANAGEMENT</u></b>	<ul style="list-style-type: none"> <li>A Describes accident procedure.</li> <li>B Demonstrates appropriate safety practices (e.g. bending, lifting, etc.).</li> <li>C Demonstrates knowledge of classroom procedures and drills (e.g. earthquake, fire and emergency).</li> <li>D Describes common job site rules</li> <li>E Describes basic first aid</li> <li>F Demonstrates hazard identification</li> <li>G Describes effect of healthy/unhealthy lifestyle choices in the workplace</li> </ul>
3.00	3.00	3	<b><u>ETHICS AND LEGAL RESPONSIBILITIES</u></b>	<ul style="list-style-type: none"> <li>A Defines sexual harassment and discusses tactics for handling harassment situations.</li> <li>B Applies appropriate workplace behavior and standards.</li> <li>C Demonstrates awareness of OSHA rules and regulations</li> </ul>
3.00	3.00	4	<b><u>LEADERSHIP AND TEAMWORK</u></b>	<ul style="list-style-type: none"> <li>A Describes the characteristics and benefits of teamwork and leadership.</li> <li>B Demonstrates ability to make appropriate decisions.</li> <li>C Works well with others and gives/takes constructive criticism.</li> </ul>

Hours	
Class	OJT

15.00		<b>5 <u>CAREER PLANNING</u></b> <b>A</b> Prepares a finished, professional portfolio showing the best work that has been completed during the class. <b>B</b> Locates job opportunities through the use of want-ads and placement agencies. <b>C</b> Visits at least one facility related to area of training and observes jobs performed. <b>D</b> Completes a job application correctly. <b>E</b> Prepares for and critiques a simulated employment interview. <b>F</b> Discusses employee benefits and rights as related to the specific occupational job area including gender equity and equal opportunity. <b>G</b> Identifies acceptable procedures to leave a job. <b>H</b> Applies for a scholarship. <b>I</b> Completes a professional resume. <b>J</b> Demonstrates appropriate personal grooming and dress.
3.00	3.00	<b>6 <u>COMMUNICATION</u></b> <b>A</b> Uses effective workplace conversation. <b>B</b> Reads and interprets written information and directions. <b>C</b> Practices various forms of written communication appropriate to the occupation. <b>D</b> Shows effective work habits and punctuality
5.00	5.00	<b>7 <u>STUDENT OUTCOMES</u></b> <b>A</b> Demonstrates Occupational Specific, Communication and Critical Thinking Skills <b>B</b> Demonstrates Responsible Work Ethics <b>C</b> Demonstrates Career/Employment Literacy <b>D</b> Demonstrates Effective Use of Technology
30.00	20.00	<b>8 <u>CONSTRUCTION MATHEMATICS</u></b> <b>A</b> Demonstrates knowledge of addition, subtraction, multiplication and division of whole numbers, decimals, fractions and mixed numbers <b>B</b> Demonstrates knowledge of measurement
20.00	10.00	<b>9 <u>BASIC BLUEPRINT READING</u></b> <b>A</b> Orientation of prints <b>B</b> Identifies views and lines <b>C</b> Identifies basic and structure symbols and abbreviations <b>D</b> Demonstrates basic garden wall drawings/retaining wall drawings <b>E</b> Describes methods of construction
40.00	20.00	<b>10 <u>MATERIALS-IDENTIFICATION AND USE</u></b> <b>A</b> Demonstrates and/or explains block sizes, adds brick, paving, stucco or cultured stone <b>B</b> Explains block standards <b>C</b> Identifies the different kinds of block/brick <b>D</b> Explains the different sizes and shapes of block and their uses <b>E</b> Explains how block are manufactured <b>F</b> Demonstrates method of construction, type of mortar, bonding material, reinforcing, quality of material and estimating cost of materials
40.00	20.00	<b>11 <u>REINFORCING STEEL (REBAR)</u></b> <b>A</b> Demonstrates and/or explains sizes <b>B</b> Demonstrates fabricating shapes <b>C</b> Demonstrates cutter-benders <b>D</b> Explains 40 diameter rule <b>E</b> Demonstrates rebar placement <b>F</b> Demonstrates tying rebar

Hours	
Class	OJT

60.00	40.00	<b>12 MORTAR</b>
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- A Explains types of mortar and their uses
- B Demonstrates mixing by hand and by mixer
- C Demonstrates mixing procedure
- D Demonstrates correct proportions of ingredients
- E Demonstrates mixing the correct amounts needed
- F Explains ad mixtures

60.00	40.00	<b>13 USE OF TOOLS AND EQUIPMENT</b>
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- A Explains Personal Safety Equipment (P.P.E.)
- B Demonstrates manipulation of tools
- C Demonstrates techniques of spreading and buttering
- D Describes working smarter and safer
- E Demonstrates the correct use of a level
- F Demonstrates proper care and operation of a cement mixer
- G Demonstrates proper care of personal hand tools

80.00	50.00	<b>14 PROJECT APPLICATIONS</b>
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- A Demonstrates following the project drawing
- B Demonstrates use of tools
- C Demonstrates organizing project work area
- D Demonstrates proper layout
- E Demonstrates measurement accuracy
- F Demonstrates tooling of project
- G Demonstrates tear-down and clean-up procedures
- H Finishes project in time allowed

85.00	50.00	<b>15 INDIVIDUAL PROJECT</b>
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- A Demonstrates ability to work with limited supervision
- B Discusses if project bonded correctly
- C Demonstrates building skills learned in the classroom
- D Works efficiently
- E Demonstrates cleanliness of finished project
- F Projects plumb and level
- G Demonstrates good work ethic

**TOTAL HOURS**

Class	OJT	Course
450.00	270.00	720.00