

MODULE CON1070: BUILDING CONSTRUCTION

Level: Introductory

Theme: Building Systems (Processes and Applications)

Prerequisite: CON1010 Basic Tools & Materials

Module Description: Students examine common building systems, and develop basic skills related to building a simple model or full-size system/structure.

Module Parameters: Access to a materials work centre complete with basic hand tools.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none">identify and describe the main systems found in a residential structure	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none">an oral or written presentation that identifies and describes the four major systems found in a residential structure. <p><i>Assessment Tool</i> <i>Presentations/Reports: Building Systems, CON1070-1</i></p> <p><i>Standard</i> <i>Presentation will identify and describe the purpose and major components of the structural, electrical, heating and plumbing systems</i> <i>Performance rating of 1 for each applicable task</i></p>	20
<ul style="list-style-type: none">list and describe the basic materials and hand tools used in building construction	<ul style="list-style-type: none">the accurate identification and description of four different building materials and 10 hand tools used in building construction. <p><i>Assessment Tool</i> <i>Presentations/Reports: Building Systems, CON1070-1</i></p> <p><i>Standard</i> <i>Performance rating of 1 in each applicable task</i></p>	20

MODULE CON1070: BUILDING CONSTRUCTION (continued)

Concept	Specific Learner Expectations	Notes
<p>Orientation</p> <ul style="list-style-type: none"> • Nature of Construction • Project Design and Construction • Health and Safety 	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • list and describe the major types of construction projects; e.g.: <ul style="list-style-type: none"> – residential – industrial – commercial – civil • describe how information is gathered and used in the construction industry • list and describe the systems that are found in most buildings; e.g.: <ul style="list-style-type: none"> – structural – electrical – heating, ventilating and air conditioning – water and waste removal • describe the methods that are used to communicate ideas and information relative to design and construction of a project • identify the factors that affect the design of a structure such as safety, function and aesthetics • identify design techniques that are used to counteract static and dynamic forces on a structure • describe how structural materials and construction tools are safely used on the work site. 	<p>Students should understand that a construction project can be something other than a building.</p> <p>Refer to the clients' needs, site information engineering specifications and building codes.</p> <p>Have students gain experiences reading simple architectural drawings.</p> <p>Investigate the use of braces, trusses and ties commonly used in construction.</p> <p>Have students become aware of the role of OH&S in relation to workers.</p>
<p>Planning and Management</p> <ul style="list-style-type: none"> • Design 	<ul style="list-style-type: none"> • select or modify a set of working drawings to build a simple building structure or system • select or identify an appropriate location 	<p>The structure can be full size or built to scale.</p>

MODULE CON1070: BUILDING CONSTRUCTION (continued)

Concept	Specific Learner Expectations	Notes
<ul style="list-style-type: none"> • Material Selection 	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • identify the materials that can be used to construct the: <ul style="list-style-type: none"> – foundation or support system – floor and wall system – roof system – exterior/interior finishes • describe the landscaping features that will be used to complete the project. 	<p>All terminology used in this module should be consistent with the <i>Canadian Wood-Frame House Construction</i> glossary of terms.</p>
<p>Implementation</p> <ul style="list-style-type: none"> • Building Processing • Personal Safety 	<ul style="list-style-type: none"> • use the appropriate tools, materials and processes to: <ul style="list-style-type: none"> – construct a simple shelter, scale model or system • use the appropriate personal protective clothing and equipment. 	
<p>Assessment</p> <ul style="list-style-type: none"> • Career Information • Career Preparation 	<ul style="list-style-type: none"> • identify and describe skilled, technical and professional occupations that are related to the building construction industry • identify and assess personal interests and abilities related to making realistic career choices • maintain a record of completed activities within a portfolio. 	