

COURSE CON3040: STAIR CONSTRUCTION

Level:	Advanced
Theme:	Building Systems (Processes and Applications)
Prerequisite:	CON1010 Basic Tools & Materials
Description:	Students develop the knowledge and skills required to build a straight flight of stairs.

Parameters: Access to a building site and/or construction facility and to instruction from an individual with formal, specialized training in carpentry.

Supporting Courses: CON1070 Building Construction
CON2040 Framing Systems 1 (Floor & Wall)

Curriculum and Assessment Standards

General Outcomes	Assessment Criteria and Conditions	Suggested Emphasis
<i>The student will:</i> <ul style="list-style-type: none"> identify and describe different stair types, component parts and construction techniques interpret building code regulations pertaining to residential stair design 	<i>Assessment of student achievement should be based on:</i> <ul style="list-style-type: none"> presentation of a written research project that identifies and describes four different stair and stringer types 	15
	<ul style="list-style-type: none"> completion of a “Spec Sheet” that outlines the code requirements pertaining to a specific stair application. <i>Assessment Tool</i> <i>Research Process: Stair Construction, CON3040–1</i> <i>Standard</i> <i>The specifications should accurately address the allowable type and size of nosing, the amount of head room and unit rise and run</i> <i>Performance rating of 3 for each applicable task</i>	15

MODULE CON3040: STAIR CONSTRUCTION (continued)

Concept	Specific Learner Expectations	Notes
<ul style="list-style-type: none"> • Stair and Rail Construction (continued) 	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • describe the specific building code regulations regarding headroom, rise, run and railing specifications • identify a typical layout procedure for a wooden stringer • research methods of attaching and finishing treads and risers; e.g.: <ul style="list-style-type: none"> – housed – semi-housed – built-up stringer – notched stringer. 	<p>Refer to local building codes.</p> <p>Explain the advantages and disadvantages of the various stair designs from the point of view of cost, ease of construction and strength.</p>
<p>Planning and Management</p> <ul style="list-style-type: none"> • Print Reading • Estimating 	<ul style="list-style-type: none"> • read and interpret a drawing to determine the: <ul style="list-style-type: none"> – number of runs and risers – stair width – tread, riser and stringer dimensions – joints – types of materials and fasteners – guard and railing requirements • prepare a detailed material list and cost estimate. 	
<p>Implementation</p> <ul style="list-style-type: none"> • Material Processing 	<ul style="list-style-type: none"> • use the appropriate tools, materials and processes to: <ul style="list-style-type: none"> – prefabricate a set of stairs – install a suitable railing – check for code conformity. 	
<p>Assessment</p> <ul style="list-style-type: none"> • Career Information • Career Preparation 	<ul style="list-style-type: none"> • research business and career opportunities related to prefabricated stair construction and installation • maintain a record of completed activities within a portfolio. 	

