

## Learning Plan – Unit W5904

### Building Design & Construction Technology

W605 Certificate IV Building & Construction (Building)

**SEMESTER 1 - 2010**

Unit titles and national codes (SIN )	Apply site surveys and set out procedures to building and construction projects (W5904), (National Code CPCCBC4018A)
Lecturer	Karl Boeing
Email	<a href="mailto:karl.boeing@central.wa.edu.au">karl.boeing@central.wa.edu.au</a>
Phone	9202 4398
Consultation details	Tuesday 16:00-18:00 (082308) Wednesday 13:00-15:00 (082002)
Venue	L1313 (Tuesday►082308) & L1301 (Wed►082002)

Resources	Building Site Surveying and Setout 1 – <i>Learner's Guide</i> , Project notes and hand outs Dumpy level, staff, measuring tape (30 m), Steel profiles, mallet, strings
Elements or Learning Outcomes	<ol style="list-style-type: none"> <li>1. Perform setting out, measuring techniques and associated calculations</li> <li>2. Set up and use levelling devices.</li> <li>3. Construct longitudinal sections and determine associated grades and levels in typical drainage and pipeline situations.</li> <li>4. Construct longitudinal sections and determine associated grades and levels in typical drainage and pipeline situations</li> </ol>
Critical aspects of evidence	<p>A person who demonstrates competency in this unit must be able to provide evidence of:</p> <ul style="list-style-type: none"> <li>• compliance with OHS and organisational quality procedures and process within the context of this unit of competency</li> <li>• application and interpretation of relevant documentation/codes</li> <li>• accurate application of survey/levelling principles relating to performance of site set out including contouring, volume and grade calculations</li> <li>• identification of typical faults and problems and necessary action taken to rectify such faults.</li> </ul>

## ASSESSMENT SUMMARY

DUE	ASSESSMENT	ELEMENTS
<b>Week 11</b> <b>27 Apr</b> 82308 <b>28 Apr</b> 82002	<b>Theory Assessment</b> Rise & Fall, Profiles (section through Lot and boundaries), Cut & Fill, Contour lines	<b>All</b>
<b>Week 13</b>	<b>Project 1 Submission 13 May (Time 13:00)</b> Close level transverse (around C & D Block misclosure less than 12"/km)	<b>All</b>
<b>Week 15</b>	<b>Project 2 Submission 27 May (Time 13:00)</b> Grid levelling – Volumes from spot heights	<b>All</b>
<b>Week 17</b>	<b>Project 3 Submission 10 June (Time 13:00)</b> Setting out a building (profiles at set RL)	<b>All</b>

### Note:

Due to limited resources the project submission doesn't need to be in the prescribed order (e.g. Project 3 can be submitted in Week 13 or 15). The submission of projects can be in any order but it must be submitted on a due date not later than 13:00.

### Individual learning and assessment needs

Central Institute of Technology recognises that students have different learning styles and needs. Please let your lecturer know if there is anything that may have an effect on your learning.

### Results and appeals.

Please refer to the Central Institute of Technology website for information about the assessment process. The information can be found at [www.centraltafe.wa.edu.au](http://www.centraltafe.wa.edu.au). The path is; home – current students- your studies – assessment.

## LEARNING PLAN

Session	Elements addressed	Topic	Resources
<b>1</b>	<b>1</b>	Introduction to subject. Theory: Trigonometry, Areas & Volumes	Text Unit 1 pages 3 to 13; Notes"
<b>2</b>	<b>1</b>	Solve right triangle problems using geometry and trigonometry, Calculate squares, rectangle &	Text Unit 1 pages 13 to 29; Notes"
<b>3</b>	<b>1</b>	Properties of figures/Review exercises.	Text Unit 1 pages 13 to 29; Notes
<b>4</b>	<b>2</b>	Equipment for residential levelling and set out	Text Units 3, 4 Notes

Session	Elements addressed	Topic	Resources
5	2	Booking of levels/Sections through sites using collimation & rise & fall method	Text Units 5, 7 Notes
6	2,3,4	Sections through sites / Measurement from grid spots	Text Units 6, 7 Notes
7	3	Contours & site plans	Text Units 6, Notes
8	3,4	Establish contours lines on site plans	Text Units 6, Notes
<b>Easter Term Break</b>			
9	3,4	Calculate cut and fill	Text Units 6, Notes
10	3,4	More cut and fill calculations Revision of all topics	Text Units 6, Notes
11	All	<b>Theory Assessment</b> Rise & Fall, Profiles sections, Cut & Fill, Contour	Text Units 1 to 6, Notes
12	All	<b>Project 1 field work</b>	Project Notes Text Units 5,6, 7
13	All	<b>Project 1 Submission 13 May (Time 13:00)</b> Close level transverse (around C & D Block misclosure less than 12√km)	All Project Notes Text Units 5,6, 7
14	All	<b>Project 2 field work</b>	All Project Notes Text Units 5,6, 7
15	All	<b>Project 2 Submission 27 May (Time 13:00)</b> Grid levelling – Volumes from spot heights	All Project Notes Text Units 5,6, 7
16	All	<b>Project 3 field work</b>	All Project Notes Text Units 5,6, 7
17	All	<b>Project 3 field work</b>	All Project Notes Text Units 5,6, 7
18	All	<b>Project 3 Submission 10 June (Time 13:00)</b> Setting out a building (profiles at set RL)	All Project Notes Text Units 5,6, 7
19		Marking, Practical Project - Results entry in ASRI Results displayed on 'Results' board	
20		Results entry in ASRI	

Program is subject to change without further notice