Learning Plan – Unit W5939

Building Design & Construction Technology

W268 Diploma of Building and Construction (Building)
This qualification is nationally recognised (BCG50206)

SEMESTER 1 - 2010

Unit titles and national codes (SIN)	Apply site surveys and set out procedures to medium-rise building projects (W5939), (National Code CPCCBC5006A)
Lecturer	Karl Boeing
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Consultation details	Wednesday 9:00-12:00 (082020)
Venue	L1302

Resources	Building Site Surveying and Setout 1 – *Learner's Guide,* Project notes and hand outs Dumpy level, staff, measuring tape (30 m), Steel profiles, mallet, strings
Elements or Learning Outcomes	1. Set out a T-shaped or L-shaped building on a selected site with minimal profiles. 2. Prepare and test levelling devices. 3. Operate levelling devices. 4. Identify specialised levelling and surveying equipment available on large building projects for various set out and checking procedures. 5. Compute coordinates, and bearings, and distances related to grids and general set out work on large building sites.
Critical aspects of evidence	A person who demonstrates competency in this unit must be able to provide evidence of: • accurate application of survey and levelling principles relating to performance of site set out • compliance with OHS and organisational quality procedures and processes • application and interpretation of relevant documentation, codes and legislation • application of principles relating to performance of survey and site set out procedures and principles of selection

Critical aspects of evidence (cont.)	• use of levelling devices to survey and set out building projects • identification of typical faults and problems and necessary action taken to rectify • identification of hazard categories according to Australian standards, BCA and specifications.

ASSESSMENT SUMMARY

DUE	ASSESSMENT	ELEMENTS
Week 9 **14 April**	**Theory Assessment** Rise & Fall, Profiles (boundaries), Cut & Fill, Contour lines	**All**
Week 12 **5 May**	**Assignment 1** **Levelling devices**	**2 & 3**
Week 15 **26 May**	**Assignment 2** Rectangular coordinates	**2, 3 & 5**
Week 17 **9 June**	**Assignment 3** **Polar coordinates**	**2, 3 & 5**

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. The path is; home – current students- your studies – assessment.

LEARNING PLAN

Session	Elements addressed	Topic	Resources
1		Introduction to subject. Discussion how to run the unit to accommodate students need. Theory: Trigonometry, Areas & Volumes	Building Site Surveying and Setout 1 \ Hand outs
2		Continue Trigonometry, Areas & Volumes	Building Site Surveying & Setout 1 & Hand outs
3		Height of collimation , Rise & Fall Method,	Building Site Surveying & Setout 1 & Hand outs
4		Calculation - Rise & Fall, Profile sections. (Labelling, H&V scale)	Building Site Surveying & Setout 1 & Hand outs
5		Contour lines, (Ridge, Valley, Saddle, Draw & Spur, depression, cliff)	Building Site Surveying & Setout 1 & Hand outs

Session	Elements addressed	Topic	Resources
6		Grid point levelling, (interpolation between grid points (similar triangles) Lot 63 & Lot71	Building Site Surveying & Setout 1 & Hand outs
7		Volume calculation of rectangular prisms (single prisms & grid calculation method)	Building Site Surveying & Setout 1 & Hand outs
8	1, 2 & 3	Practical Projects: Close level run, grid point levelling & Volume calculation Revision of previous subject matter. (O&A)	Building Site Surveying & Setout 1 & Hand outs
Easter Term Break			
9		**Theory Assessment** Rise & Fall, Profiles sections, Cut & Fill, Contour lines	Building Site Surveying & Setout 1 & Hand outs
10	2 & 3	Theory and Practice of levelling devices Preparation, testing and operation	Hand outs Internet
11	5	Angular relationship (bearings & polar coordinates)	Hand outs Internet
12		Theory: Set Out Procedures Chainline & offsets; polar coordinates **Submission of Assignment 1**	Hand outs Internet
13	3, 4 & 5	Theory & practice (horizontal & vertical angles using level, inclinometer & theodolite,	Hand outs Internet
14	1, 3 & 5	Practical project Setting out L-shaped building using chainline & offsets	Hand outs Internet
15	1, 3 & 5	Practical project Setting out L-shaped building using polar coordinates **Submission of Assignment 2**	Hand outs Internet
16	4	Practical project Checking vertical height Revision & feedback on assignments	Hand outs Internet
17		Profiles set-up for l-shaped building Group 1 **Submission Assignment 3**	Hand outs Internet
18		Profiles set-up for l-shaped building Group2	Hand outs Internet
19		Marking - Results on Board	
20		Results entry in ASRI	

Program is subject to change without further notice