

SCHOOL OF ARCHITECTURE, BUILDING & DESIGN

Centre For Modern Architecture Studies in Southeast Asia Bachelor of Science (Honours) (Architecture

DESIGN COMMUNICATION [ARC 1713]

Prerequisite: None

Project: 2A Brief & Marking Rubric

Orthographic projections: plans, sections, elevations

Submission date:

Part1: 28/04/2016 Part2: 24/05/2016

Introduction

Orthographic projections

"A means of representing a three-dimensional object in two dimensions along with drawing that communicates the shape and size of an object through a series of related two-dimensional views" - Edwin Chomen

Objectives of Project

You are to utilize the given images of a furniture (for Part 1) and a building (for Part 2) to be drawn up. By using the skills demonstrated and explained in the workshops draw up the following required orthographic drawings.

Learning Outcomes of this Project

- 1. Demonstrate drafting skills in modern and traditional methods of architectural drawing.
- 2. Record and present clear and legible architectural information manually.
- 3. Identify and apply architectural conventions and symbols.
- 4. Demonstrate in pencil and ink examples of:
- line types
- line weights
- line quality
- hand lettering

Tasks - Methodology

In this project 2a, you will include sufficient evidence to show that you are competent in a range of architectural drafting skills.

The following evidence should be presented for project 2a part 1:

- top view
- at least two selected side views
- at least one section

The project evidence may be produced in pencil at first, and ink it up for the final submission. For submission you will submit one A2 pencil drawing and one A2 ink drawing. (paper size may be subject to change)

The project 2a part2 will be start by making the model of the introduced building.

The following evidence should be presented for project 2a part 2 submission:

A draft out architectural drawing on butter paper as an evidence for this assignment consisting of:

- floor plans
- front, back and both (left & right) side elevations of the given building
- 2 x cross-section view of the building showing floor and roof construction.

The project evidence may be produced in pencil at first, and ink it up for the final submission.

- * It is your responsibility to bring all necessary equipments to facilitate your sketching and note-taking. Suggested materials and equipment: drafting pens/technical pens (different points: 0.1, 0.2, 0.3, 0.5); pencils, eraser, T square, set square, cartridge paper/ tracing paper, drafting board, masking tape.
- **You are to incorporate the skills developed from the workshop exercises (hand-lettering, orthographic and paraline drawing, plan drawing) into this assessment.

Submission Requirement for Part 2

- 1 ground floor plan
- 4 elevations (front, back, left & right elevations)
- 1 cross-section
- 1 longitudinal section
- 1 site plan (optional @ a smaller scale)

All these drawing have to be of a standard appropriate architectural scale (1: 75, TBC)

Assessment criteria

- Communicate <u>clarity and accuracy</u> of drawn information
- Quality of line weight
- Ability to demonstrate gained knowledge, skill, and understanding of orthographic projections in architectural documentation
- Appropriate use of technique and scale

Suggested References

- Uddin, M. Salleh 1997. Axonometric and Oblique Drawings: A 3-D Construction, Rendering, and 1. Design Guide, The McGraw-Hill Companies, New York.
- Yee, Rendow 2007. Architectural Drawing: A Visual Compendium of Types and Methods. Wiley* 2.
- 3.
- Francis D.K Ching 1989. Drawing: A Creative Process Francis D.K Ching 2014 Building Construction Illustrated, 5th Edition 4.

Marking criteria

Marking criteria are as follows according to the rubric breakdown:

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Prerequisite: None

Project: 2a

Orthographic Projections

Learning Outcomes of this Project (as stated in outline)

- 1. Demonstrate drafting skills in modern and traditional methods of architectural drawing.
- 2. Record and present clear and legible architectural information manually.
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- 4. Demonstrate in pencil and ink examples of:
- line types
- line weights
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Assessment criteria (as stated in outline and in lecture)

The students are to prove their ability as mentioned in the learning outcomes through the following criteria:

- 1. Line weight
- 2. Line type
- 3. Scale
- 4. Labelling
- Lettering

to prove that they can/demonstrate:

- Communicate <u>clarity and accuracy</u> of drawn information
- Quality of <u>line weight</u>
- Ability to demonstrate <u>gained knowledge</u>, <u>skill</u>, <u>and understanding</u> of <u>orthographic projections in</u> <u>architectural documentation</u>
- Appropriate use of technique and scale

Marking rubric

	Criteria	Guideline: Considerations when awarding points
	Does the student know what he is drawing? This will be evident in:	
1	Choice of line weight	Thicker lineweights to denote structure and section cuts
2	Choice of line type	Are dashed and dotted lines used appropriately to denote objects below/above/beyond the projection?
3	Quality of line	Is the student confident in what he is drawing or is he tracing it uncertainly? <u>Note:</u> where quality of line is poor due to inking skills more so than uncertainty in drawing, marks shall not be penalised.
	Has the student labelled & annotated This will be evident in:	their drawing clearly?
1	Hand-lettering skills	Only architectural hand-lettering is acceptable.
2	Labelling	- Drawing title - Scale bar/Scale - North point - Room labels - Student name
	Are they able to produce basic-level architectural drawings? This will be evident in:	
1	Overall drawing skills	How has the student fared in overall drawing skills technically?
2	Overall understanding of drawing what he understands/reads of the building	How has the student fared in overall understanding of the architecture of the house as executed in his drawings?
3	Consistency in scale	This tells us whether the student has been constructing his sections and elevations from the plan or merely tracing it.

<u>General note:</u> Do account for that some of the students' have poor enlarged photocopies that may have fractionally skewed their drawings, hence should they have followed the measure dimensions accurately, some may have slightly skewed plans, sections and elevations. But this should only be marginal, and therefore should not be penalised.

Using the rubric

Of the 3 main questions above, rate the students on a scale of 1 to 10 across all drawings. The reason why we shall do so is because the drawings should be read as an entire set, as opposed to an individual and separate drawing. The rating of the scale will range from 1-3 being poor, 4-6 for average work, 7-8 for good work and 9-10 for excellent handling and mastering.