



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: 2b

Axonometric projection

Submission date: 7/06/ 2016

Introduction

Axonometric drawing is an excellent method of communicating and expressing an architectural idea – be it as a diagram at a fairly early stage of the design process (ie. conceptual expression) or as a presentation aid upon finalization of your design.

Axonometric drawings are a visually instigating and exciting way of expressing an idea clearly with minimal words if executed well.

Objectives of Project

In the production of the work for the Orthographic Projections assessment, you would have, by now, a fairly in-depth understanding of the architectural detail and spatial value of a building (which will introduce to you by your lecturer).

In the next exercise, you will learn how to execute an axonometric projection by generating p an exploded axonometric of the house.

These projections will be generated at a scale of 1:100 on butter paper (for construction) and finally inked on A1-sized tracing paper.

Learning Outcomes of this Project

1. Ability to express spatial ideas and architectural detail in three-dimension, in the format of an axonometric projection.
2. Understanding of what axonometric projections are, how to generate them and how to apply them to the design process and presentation.
3. Ability to produce legible architectural drawings.

Tasks - Methodology

Following the demonstration in the lecture, use pencil and butter paper to generate axonometric drawing of a building. You are to refer to your orthographic drawings AND the documents for measurements and information throughout this exercise. After having confidently constructed your drawing in pencil, proceed to trace your final ink drawing on tracing paper..

Submission Requirement

Please submit the construction drawing (pencil on butter paper) and final presentation drawing (ink on A1 tracing paper).

Assessment criteria

- Understanding and ability to generate axonometric drawings
- Communicate understanding of architectural detail and spatial value with clarity and accuracy
- Quality of hand-drawing skills (neatness of line, overall visual aesthetic of the drawing, etc.)
- Appropriate use of technique and scale

Marking criteria

Marks shall be distributed according to the assessment criteria mentioned above.

Suggested References

Ching, Francis 2003. *Architectural Graphics*, 4th Edition, John Wiley & Sons, Inc, New York

Uddin, M. Salleh 1997. 'Chapter 2: Conventions and Construction of Paralines' in *Axonometric and Oblique Drawings: A 3-D Construction, Rendering, and Design Guide*, The Mc-Graw-Hill Companies, New York, pp. 7-46.

Uddin, M. Salleh 1997. 'Exploded Axonometric', in *Axonometric and Oblique Drawings: A 3-D Construction, Rendering, and Design Guide*, The Mc-Graw-Hill Companies, New York, pp. 123-132.



TAYLOR'S UNIVERSITY

Wisdom • Integrity • Excellence

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Marking Rubric For Axonometric Projections

Learning Outcomes of this Project (as stated in outline)

- Ability to express spatial ideas and architectural detail in three-dimension, in the format of an axonometric projection.
- Understanding of what axonometric projections are, how to generate them and how to apply them to the design process and presentation.
- Ability to produce legible architectural drawings.

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:

- Confidence in executing axonometric projection
- Understanding of building in three-dimension
- Extra marks for visual strength, composition, and added detail

Marking rubric

Criteria	Guideline: Considerations when awarding points
Does the student know how to draw in axonometric? This will be evident in:	
Construction of axonometric	Is it evident from submitted butter paper drawings that the student has constructed his own drawing? In these constructions has he demonstrated an understanding of the basics in projecting axonometric?
Does the student know what he is drawing? This will be evident in:	
Building & architectural details	Is the student clear on what he is drawing? Are details such as wall thickness, window framing,

		sectional cuts, roof detail, furniture detail and stair design clearly drawn? And to what extent and detail has the student illustrated any or all and more of the above-mentioned?
How have they enriched their drawings? (bonus section) This will be evident in:		
1	Visual strength/composition	How has the student creatively composed his drawings together on the submitted sheet? Has the student experimented with different line weights, medium or other drawing techniques to enhance the drawing and/or the legibility of it? If so, how successful has he been with it?
2	Added details	Has the student added more detail to his drawing to give it life? If so, how much illustration and detail has he executed? Has he demonstrated a confident style and/or consistent language throughout his drawing and the finer details? Has he been successful in the overall communication of the building, space and its function?

Using the rubric

Using the above criteria and series of questions as a guide, grade the student based on an average of the three main questions. Meaning out of the total of 15% weightage that this assessment carries, each of the three questions will carry 5%.

From 0 being none of the criteria met; to 1 for weak; 3 for average; 4 for good and 5 for excellent work, this is still a rough scale and guide as the student's progress in class should also be accounted for (hence using this rubric more as a guide than a strict rule). Students' whose works are around average but have proved to you a tremendous development during workshop times will therefore score a higher grade.

