

CONSTRUCTION TECHNOLOGY GROUP WORK - TASK

CONSTRUCTION IN SPACE: STRUCTURE SCULPTURE WITH INNER FORCE

DESIGN PROPOSITION:

Constructivism was an artistic and architectural philosophy that originated in Russia beginning in 1919, a rejection of the idea of autonomous art.

Constructivism had a great effect on modern architecture movements of the 20th century such as the Bauhaus and De Stijl.

Constructivism concerned with constructions in space, which at first are interpreted as sculpture, or, however, can also be understood as the basic principles for architecture.

An important part is played in their conception by haptic and optic charms arising out of the combination of various materials and forms in these spatial constructions.

This design assignment aims to pay tribute to these avant-garde pioneers. By using similar concept and technique, this assignment encourages students to explore their emotions and abstract ideas and transform them into a sculpture, a construction in space, with the inner forces of forms and objects.

LEARNING OBJECTIVES:

1. To understand the basic principles of structure and to transform the knowledge into a 3D form.
2. To practice the skills of 3D model making.
3. To work as part of a group in problem solving, working to a deadline and managing the process of design to construction.
4. To have basic understanding of the characteristic of materials and structure through the practice of sculpture making.
5. To apply creativity and aesthetic interpretation in 3D form making.
6. To practice different tools, such as utility cutter, saw, cutting ruler in model making.
7. To learn basic ideas of tectonic connection through model making.

DESIGN DIRECTION:

1. Students should set up a theme of an abstract concept of architecture of their interpretation/imagination, such as "free," "high," "futuristic," "dignified," ...and so on as the topic of their sculpture.

2. Students are asked to find at least 3 plastic bottles of any kind, as part of their sculpture object.

3. Students are asked to use corrugated paper/ card (up to 5mm in thickness) to combine 3 plastic bottles to form their sculpture in interpreting their ideas of architecture.

4. The sculpture should be able to stand by itself.

It cannot be lower than 1200mm (120cm) in height. The measurement is calculated from the ground level to the top when the sculpture stands alone. The 3 plastic bottles should combine steady in the sculpture but cannot be connected together or come in contact with the ground.

5. No glue or tape is allowed in constructing this structure/ sculpture only interlocking techniques will be allowed.

MATERIALS AND TOOLS:

Corrugated cardboard utility knife, cutting board, safety cutting ruler.

GROUP TASK PROPOSALS

1. A2 Posters include

- (1) Design concept,
- (2) Design process/rough models/diagrams,
- (3) Images of final sculpture, vertical or horizontal is not limited.

2. Final sculpture should fulfil the following requirement:

- (1) Stand by itself with height no lower than 1200mm (120cm),
- (2) Contain 3 plastic bottles of any kind,
- (3) Bottles cannot touch each other or the ground.
- (4) No glues or tapes are applied in the sculpture.