

Architectural Drafting 2

Technology and Engineering

Grades 11 - 12, .5 Credits

Course Overview

Architectural Drafting 2 is a continuation of Architectural Drafting 1. Upon completion of all drawings, the student will develop a model of that house. Computer-Aided Drafting may be incorporated. This course requires a fee of \$15.00 to cover the cost of materials.

Scope and Sequence

Timeframe	Unit	Instructional Topics
2 Week(s)	Basement / Lot Layout	1. Getting Started
3 Week(s)	Exterior Wall Construction	1. Materials
3 Week(s)	Interior Floor and Wall Construction	1. Accuracy
1 Week(s)	Landscape Construction	1. Landscape
Ongoing	Roof Construction	1. Roof Construction

Materials and Resources

Foam board
 X-Acto Knife
 White Glue
 Completed drawings
 Stick Pins
 Cardboard
 Cutting board
 Instructor expertise

Course Details

UNIT: Basement / Lot Layout -- 2 Week(s)

Description

Students will layout the basement floor plan onto a sheet of cardboard (lot).

Academic Vocabulary

Stick pins, Straight edge,

Materials and Resources

X-Acto Knife
Stick pins
White glue
Basement Floor Plan
Cutting board

TOPIC: Getting Started -- 1 Day(s)

Description

The student will situate the basement floor plan onto a piece of cardboard. Stick pins are used to transfer the drawing onto the cardboard. The student then recreates the floorplan.

Learning Targets

Situate the house for optimum appeal

Working within the constraints of the cardboard size the student will situate the house for optimum appeal.

UNIT: Exterior Wall Construction -- 3 Week(s)

Description

The student will construct the exterior walls of their house based upon elevation drawings.

Academic Vocabulary

Foam board, glue, X-acto knife, blade sharpener

Materials and Resources

X-Acto knife
Stick pins
White glue
Elevation drawings
Foam board

TOPIC: Materials [Ongoing]

Description

The student needs to be aware of the cost of materials in this course. Therefore forethought and patience need to be used in the selection and usage of materials so as not to waste them.

Learning Targets

Demonstrate proper utilization of materials to minimize waste

The student will not waste materials.

UNIT: Interior Floor and Wall Construction -- 3 Week(s)

Description

The student will construct interior floors and walls based upon floor plans.

Materials and Resources

Floor plans
Stick pins
White glue

X-Acto knife
Foam board
Cutting board

TOPIC: Accuracy [Ongoing]

Description

Accuracy is a skill that will be developed over time in order to reduce human error.

Learning Targets

Demonstrate construction and layout accuracy

The time spent on being accurate in the layout and construction of the floors is of utmost importance.

UNIT: Landscape Construction -- 1 Week(s)

Description

The student will build up landscape contours around the residence.

Academic Vocabulary

Berm, Contour lines

Materials and Resources

Cardboard
X-Acto knife
Stick pins
White glue
Cutting board

TOPIC: Roof Construction [Ongoing]

Description

Using the roofing plan as a guide, roofs are created.

Learning Targets

Develop a design that can be constructed out of simple materials

UNIT: Roof Construction -- Ongoing

Description

Roof construction requires the completion of a Roofing Plan. The student will work one-on-one with the instructor in order to complete the roof.

Academic Vocabulary

Peak, Valley, Ridge, Pitch, Hip, Gable, Overhang, Speciality Triangles

Materials and Resources

Instructor guidance
Stick pins
White glue
Roofing Plan
Foam board
X-Acto knife
Cutting board

TOPIC: Roof Construction [Ongoing]

Description

Using the roofing plan as a guide, roofs are created.

Learning Targets

Create Hip and / or Gable roofs

The student will produce a roofing system that is base on a roofing plan for their house.