Unit 02: Bedrooms, Bathrooms & Beyond

Content Area: **Technology**
Course(s): **Architecture**
Time Period: **September**
Length: **8 Blocks**
Status: **Published**

Transfer Skills

Residential design is influenced by several factors including historical trends, building codes, financial resources, environmental considerations, family needs, and availability of resources.

Enduring Understandings

1. Residential design is influenced by several factors including historical trends, building codes, financial resources, environmental considerations, family needs, and availability of resources.

2. Individuals rooms must be planned together to ensure proper “flow” throughout the design.

3. Architectural floor plans are the most important drawing from which all other plans are derived from.

4. Additional drawings, such as elevation views, are used to further communicate a design.

Essential Questions

1. What factors must be considered when designing a residential house?

2. How are the rooms in a typical residential home related to each other?

3. How does the environment and geographic location influence house design?

4. How does furniture impact the design of individual rooms?

5. What is necessary to fully describe a design?

6. How can plumping features be arranged so they're more efficient?

Content

Vocabulary:

living area, sleeping area, service area, traffic area, clearances, traffic flow, building codes, fire codes, open-concept, 1/2 bath, 3/4 bath, full bath, trap, vent, egress, cross-ventilation, vanity, pedestal sink

Skills

1. Describe why the furniture layout in a room dictates its design.

2. Create a furniture and window layout for several sizes of bedrooms.

3. Create a plumbing fixture layout for several sizes of bathrooms.

4. Create a furniture and window layout for a living room.

5. Design and create a master bedroom suite with attached bathroom.

Resources

11x17 Paper / Drawing Boards / T Square / Pencil / Erasers / Rendering Markers

Standards

NJ: Grade 9 - 12

9.3 CTE: B. Architecture & Construction Career Cluster

Academic Foundations:

9.3.12.AC-DES.5 Identify the diversity of needs, values and social patterns in project design, including accessibility standards.

Communication Skills:

9.3.12.AC-DES.6 Apply the techniques and skills of modern drafting, design, engineering and construction to projects.

9.3.12.AC-DES.7 Employ appropriate representational media to communicate concepts and project design.

9.3.12.AC-DES.1 Justify design solutions through the use of research documentation and analysis of data.

Problem-Solving and Critical Thinking:

9.3.12.AC-DES.8 Apply standards, applications and restrictions pertaining to the selection and use of construction materials, components and assemblies in the project design.

9.3.12.AC.4 Evaluate the nature and scope of the Architecture & Construction Career Cluster and the role of architecture and construction in society and the economy.

9.3.12.AC.6 Read, interpret and use technical drawings, documents and specifications to plan a project.

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