

Architectural Design - Unit 1 - The Proposal

Unit Focus

The nature of this course will revolve around designing a house on a piece a property for a given client. This process will take place over two units in which they will focus on developing the proposal (Unit 1) and carrying out the proposal in creating the home design (Unit 2).

In Unit 1, students will get the experience of acting as an architect and dealing with a client in developing a proposal to meet their needs. This unit focuses on the conceptual design of residential buildings with emphasis on preliminary design development and model building . Emphasis will be placed on developing the student's ability to research, analyze, and evaluate information from the client as the design evolves. The PBA will have students prepare a conceptual design of a home for review by their given client.

Stage 1: Desired Results - Key Understandings

Established Goals	Transfer	
<p>Connecticut Goals and Standards <i>Building Construction: 12</i></p> <ul style="list-style-type: none"> • Create ideas, proposals, and solutions to building construction problems. <i>BC.06.02</i> • Evaluate ideas, proposals, and solutions to building construction problems. <i>BC.06.03</i> <p><i>Design and Development: 8</i></p> <ul style="list-style-type: none"> • Evaluate the effectiveness of a model and recommend necessary changes. <i>DD.02.12</i> <p><i>Technology Education (CTE)</i></p> <ul style="list-style-type: none"> • Express a design of an object as a 3D model. <i>TE.CADD.A.5</i> <p><i>Technology Essential Knowledge and Skills: 12</i></p> <ul style="list-style-type: none"> • Present formal and informal speeches including: discussion, information requests, interpretation, and persuasive arguments. <i>EKS.02.05</i> • Critically analyze information to determine value to the problem-solving task. <i>EKS.05.08</i> <p>Student Growth and Development 21st Century Capacities Matrix <i>Critical Thinking</i></p> <ul style="list-style-type: none"> • Synthesizing: Students will be able to thoughtfully combine information/data/evidence, concepts, 	<p>T1 Develop a product/solution that adheres to key parameters (e.g., cost, timeline, restrictions, available resources and audience).</p> <p>T2 Communicate effectively based on purpose, task, and audience using appropriate vocabulary.</p>	
	Meaning	
	Understandings	Essential Questions
	<p>U1 Architectural modeling provides a 3D visual opportunity to see the finished building before construction begins.</p> <p>U2 Conceptual design is influenced by several factors including historical trends, financial resources, environmental considerations, family needs, and availability of resources.</p>	<p>Q1 What is the purpose of creating 3D architectural models?</p> <p>Q2 What different aspects of a home make the design desirable or undesirable to a client?</p> <p>Q3 What is the difference between functional and aesthetic features?</p>
	Acquisition of Knowledge and Skill	
	Knowledge	Skills
	<p>K1 Drawings are prepared and measured using different scales.</p> <p>K2 Field cards have detailed information on each property</p>	<p>S1 Calculate the yearly property taxes of a given residence.</p> <p>S2 Measure and prepare drawings with different scales.</p>

Stage 1: Desired Results - Key Understandings

<p>texts, and disciplines to draw conclusions, create solutions, and/or verify generalizations for a given purpose. <i>MM.1.3</i></p> <p><i>Creative Thinking</i></p> <ul style="list-style-type: none"> Imagining: Students will be able to conceive of a novel approach to create a text, performance, solution, application, or inquiry. <i>MM.2.2</i> 	<p>including a picture of the building (if applicable) and an exterior sketch of the building, references to Land Record volume and page, Developers Maps, previous owners, assessment information, assessor's maps, etc.</p> <p>K3 A Solid Form Model is used to check the overall proportions of a building.</p> <p>K4 A conceptual design uses idealized and site-related sketches to create the best response to a client's needs and wants.</p> <p>K5 Home values such as appraisal, assessment and bank assessment.</p> <p>K6 Architectural styles include but limited to: Victorian, Gothic, Georgian, Colonial, Federal, Tudor, Contemporary & Craftsman.</p> <p>K7 The basic purpose and function of zoning is to divide a municipality into residential, commercial, and industrial districts (or zones), that are for the most part separate from one another, with the use of property within each district being reasonably uniform.</p> <p>K8 A development is a pattern or template which, when rolled or flattened, will produce the form of the desired object.</p>	<p>S3 Create a 3D presentation of a design through a solid form model.</p> <p>S4 Create an idealized and site related sketches for a design proposal.</p> <p>S5 Create a user analysis based on a client's wants and needs.</p> <p>S6 Create a concept design.</p> <p>S7 Propose and present a residential plan for a customer.</p> <p>S8 Synthesize zoning regulations in creating a conceptual design.</p>
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