Unit 4: Presentation Methods and Design Analysis Advanced

Content Area: **Technology**
Course(s):
Time Period: **Full Year**
Length: **Type Length of Unit**
Status: **Published**

General Overview, Course Description or Course Philosophy

This course is designed to teach students important information in the field of Architecture. Students will learn the fundamental skills and concepts necessary for architectural planning, design and drawing. Students will learn about the hard work that goes into designing a house and the problems that arise during that task. Students will be required to use his/her0their creative abilities to complete an individual yearlong project.

OBJECTIVES, ESSENTIAL QUESTIONS, ENDURING UNDERSTANDINGS

Students will understand: there are different ways to present and analyze a design.

CONTENT AREA STANDARDS

9.3.12.AC.1	Use vocabulary, symbols and formulas common to architecture and construction.
9.3.12.AC.6	Read, interpret and use technical drawings, documents and specifications to plan a project.
12.9.3.MN-HSE.1	Demonstrate the safe use of manufacturing equipment.
12.9.3.ST-ET.1	Use STEM concepts and processes to solve problems involving design and/or production.
12.9.3.ST-ET.2	Display and communicate STEM information.
12.9.3.ST-ET.3	Apply processes and concepts for the use of technological tools in STEM.
12.9.3.ST-ET.4	Apply the elements of the design process.
12.9.3.ST-ET.5	Apply the knowledge learned in STEM to solve problems.

RELATED STANDARDS (Technology, 21st Century Life & Careers, ELA Companion Standards are Required)

LA.RST.11-12.3	Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
LA.RST.11-12.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.
LA.WHST.11-12.2	Write informative/explanatory texts, including the narration of historical events, scientific

	procedures/experiments, or technical processes.
LA.WHST.9-10.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
LA.WHST.11-12.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
LA.WHST.9-10.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
LA.WHST.9-10.6	Use technology, including the Internet, to produce, share, and update writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

STUDENT LEARNING TARGETS

Students should be able to identify the proper use of each tool/machine, which tool/machine should be used for a specific task, how to safely operate and adjust each machine or tool.

Declarative Knowledge

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      - Floor plan symbols-fixtures, furniture, windows, doors, etc.
      - 3d pictures
      - Written analysis of design

Procedural Knowledge

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      - Produce a house with an accurate floor plan
      - Create interior shots/pictures of their design
      - Defend their design choices from an analytical viewpoint (as opposed to an emotional one)
      - Create and organized report defending their use of the design process
      - Use the computer and appropriate programs to create portfolio

EVIDENCE OF LEARNING

Formative Assessments

Portfolio layout and table of contents, completion of the assigned essays

Summative Assessments

Name house essay, essence of a home essay, portfolio, final house design

RESOURCES (Instructional, Supplemental, Intervention Materials)

Teacher notes and quizzes are available through Google Classroom/Drive.

Tutorial found within computer program and/or teacher-generated

INTERDISCIPLINARY CONNECTIONS

Educational Technology: Use of Google resources

ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS

See link to Accommodations & Modifications document in course folder.