

DELAWARE VALLEY SCHOOL DISTRICT

PLANNED INSTRUCTION

A PLANNED COURSE FOR:

Architectural Drawing and Design

Grade Level: 9-12

Date of Board Approval: 2016

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Planned Instruction

Title of Planned Instruction: Architectural Drawing and Design

Subject Area: Technology Education

Grade(s): 9-12

Course Description: Students will learn the basic principles of architectural drafting. Students will reinforce sketching techniques, learned in Mechanical Drawing. Sketching is an essential part of architecture. Students will learn about traditional as well as contemporary house designs. They will also be taught standard sizes and layouts of various floor plans. Emphasis will be placed on the use of the latest architecture software to design and develop architectural drawings.

Time/Credit for the Course: 1 semester (70 hours) / ½ credit

Curriculum Writing Committee: Tom Moran

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Curriculum Map

1. Marking Period One: Advanced sketching; basic shapes, single views, multiviews, orthographic and isometric, Architecture vocabulary, Detail drawings; roof, wall and foundation, traditional house design, Modern house design advantages and disadvantages: 45 days

Goals:

Unit #1 Advanced Sketching Techniques

- Students will demonstrate proper sketching techniques
- Students will utilize proper methods and techniques for accurately sketching, lines, circles, multiview and isometric drawings
- Students will understand the concepts or proportions, and scale
- Students will discuss the importance of sketching in Architectural Drawing and Design

Unit #2 Architecture Vocabulary

- Students will be able to utilize proper vocabulary to communicate technical concepts in architecture.
- Students will assess their knowledge of architectural terminology

Unit #3 Detail Drawings

- Students will reinforce some of the terms learned in unit 2
- Students will identify all of the major components in the structure of a house
- Students will be assessed on their understanding of the elements of a house
- Students will label the parts of a roof, wall and foundation detail drawing

Unit #4 House Design Portfolio

- Students will know the characteristics, which distinguish various types of house designs.
- Students will learn the history of various traditional house designs
- Students will learn how to search the web for various types of house designs
- Students will create a portfolio of different house designs.
- Students will know how to use Microsoft Publisher to create a portfolio/booklet of the various types of houses.

Unit #5 Advantages and Disadvantages of Modern House Designs

- Students will know advantages, disadvantages and characteristics of the modern house designs (Ranch, 1 ½ Story, 2 story, and Split Level).
- Students will be able to identify the four modern house designs
- Students will understand the room layout and traffic circulation of these houses
- Students will be assessed on their knowledge of the four modern designs

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Understanding of:

- The skills needed to draw more advanced sketches
- Architectural vocabulary
- Detail views
- Traditional house design characteristics
- The advantages and disadvantages of the three modern house designs (Ranch, 1 ½ story, 2 story and split level)

2. Marking Period Two – Standard residential design; room size and layout, and the three areas of a modern house (living, sleeping and service areas), Revit Architectural CAD software, and how to apply house design and create a house design using Revit: 45 days

Goals:

Unit #6: Standard Residential Layout and Design

- Students will know standards sizes and layout of rooms for their floor plan designs.
- Students will identify the three areas of a house (sleeping, service, and living) and the rooms within these areas.
- Students will know the correct placement of rooms/areas (sleeping, living, and service areas) in their house design.
- Students will understand what traffic circulation
- Students will compile notes on all of vital information relating to the three area of a house.
- Students will specific sizes of elements of a house. Such as: doors, windows, hallways, cabinets, fixtures, stairs, appliances, etc...
- Students will understand the concept of the working triangle in the kitchen.
- Students will be assessed on their knowledge of standard layout and design
- Students will apply the information to their final projects.

Unit #7: Revit: Architectural CAD software

- Students will be able to identify and utilize the basic tools of the architectural CADD software (Autodesk Revit Builder).
- Students will use Revit Builder tutorials to learn how to use the software
- Students will learn how to create floor plans using architectural CADD.
- Students will be able to use the information given to them to create a sound residential house design using Revit Builder.
- Students will add and edit: walls, doors, windows, roofs, floors, ceilings, and content (furniture).
- Students will develop documentation (drawings) of 3D renderings, elevations, scheduling, and floor plans of residential houses.
- Students will use all of this information to develop their final project

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Unit #8: Final Project / Apply Design Concepts and CAD Software

- Students will master their knowledge of residential house design standard
- Students will master proper use of the architectural CADD software Revit Builder
- Students will create a virtual walkthrough of their house design
- Students will design and draw their own house design.

Understanding of:

- The layout, size and circulation of the 3 areas of the four modern house designs
- How to use Revit Architectural to design and create a modern residential house
- Apply all of the information including the house layout and use of Revit to create an effective house design.

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UNIT 1: Advanced Sketching Techniques

Big Idea # 1:

- The skills, techniques, elements and principles of the arts can be learned, studied, refined and practiced
 - **Essential Questions:**
 - How do artists document the development of their artistic process?
 - **Concepts:**
 - Artists work to develop skills, techniques, and ideas in a sketchbook or visual journal to document and refine their process.
 - **Competencies:**
 - Generate a series of entries in a sketchbook or visual journal that demonstrates attention to skills, techniques, and ideas in process.

Big Idea #2:

- Artists use tools and resources as well as their own experiences and skills to create art
 - **Essential Questions:**
 - How do artists use tools and techniques to convey emotion and evoke emotional response?
 - **Concepts:**
 - Artists choose tools and techniques that convey emotion and evoke emotional response
 - **Competencies:**
 - Explain how artists choose tools and techniques to convey emotion and evoke emotional response.

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Curriculum Plan

Time Range in Days: 8-10 Day

Standard(s):

Arts and Humanities: 9.1: Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts

Standards Addressed: (Number only- See Appendix for Description)

Standard - 9.1.12.A, 9.1.12B

Overview: Sketching is a big part of architecture and more advanced techniques are need to create more complex sketches in this field.

Focus Question(s): Why do students need to improve their sketching skills to be an architect?

Goals: Students will improve their sketching skills so they can create more advanced drawings, which they will be required to draw and architects.

Objectives:

1. Students will demonstrate proper sketching techniques. (DOK 1)
2. Students will utilize proper methods and techniques for accurately sketching, lines, circles, multiview and isometric drawings (DOK 2)
3. Students will understand the concepts or proportions, and scale (DOK 1)
4. Students will discuss the importance of sketching in Architectural Drawing and Design (DOK 3)

Core Activities and Instructional Methods:

1. Review and practice sketching techniques learned in Mechanical Drawing I
 - a. Demonstration: basic sketching skills
 - b. Hands-on: sketch lines and basic shapes
2. Learn how to create more advanced sketches
 - a. Demonstration: advanced sketches
 - b. Hand-on: complete practice problems using techniques and methods for sketching: single view houses, multiview, and isometric.

Extensions:

Students that have mastered the basic sketching principles will be give more challenging sketch activities.

Correctives:

Individual instruction and demonstrations will be given to students having difficulty

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Assessments:

Diagnostic:

-Oral response to determine student comprehension

Formative:

-Chapter 5 questions

-Practice problems

Summative:

-Completed sketches

Materials and Resources

Smart board, *Architectural Drafting and Design* textbook (pages 58-74), drafting paper, pencils, erasers, and desks, and sketching worksheets

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UNIT 2: Architecture Vocabulary

Big Idea # 1: Technology is created used and modified by humans

Essential Questions: What is technological literacy?

Concepts: Technology and society mutually impact each other.

Competencies: Describe how technological development impacts economics, culture, and policies.

Big Idea #2: Technological design is a creative process that anyone can do which many result in new inventions and innovations.

Essential Questions: How would you explain technological design and problem solving methods in the development of inventions and innovations?

Concepts: Technological design & problem solving utilizes a series of steps that take place in a well-defined sequence.

Competencies: Employ engineering design and problem solving skills to solve complex technological challenges.

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Curriculum Plan

Time Range in Days: 6-8 days

Standard(s):

-3.4 Technology and Engineering Education

Standards Addressed:

-3.4.12.C2, 3.4.12.D2, 3.4.10.E7

Anchor(s):

-S11.A.2.1, S11.A.3.1

Overview: It is important that students use the correct terminology when discussing architecture and there are numerous terms exclusive to architecture

Focus Question(s): Do you understand the importance of using the appropriate terminology when discussing architecture?

Goals: Students will know the proper terminology for specific parts on a house.

Objectives:

1. Students will be able to utilize proper vocabulary to communicate technical concepts in architecture. (DOK 2)
2. Students will assess their knowledge of architectural terminology. (DOK 1)

Core Activities and Corresponding Instructional Methods:

1. Students will complete the assigned vocabulary sheet. Vocabulary terminology will be discussed. Students will reinforce the terms during Architectural Bingo, which is a review game, the day before the quizzes.
 - a. -Discussion, lecture, and review. These quizzes, discussions and reviews

Assessments:

Diagnostic:

Oral response

Formative:

Vocabulary worksheets

Summative:

Vocabulary quizzes (3)

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Extensions:

Students that have mastered the basic vocabulary will be given more advanced terms to learn.

Correctives:

Individual instruction and demonstrations will be given to students having difficulty

Materials and Resources

Smart board, Review worksheets, architecture packet, vocabulary quizzes (3)

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UNIT 3: Detail Drawings

Big Idea # 1: Technology is created used and modified by humans

Essential Questions: What is technological literacy?

Concepts: Technology and society mutually impact each other.

Competencies: Describe how technological development impacts economics, culture, and policies.

Big Idea #2: Technological design is a creative process that anyone can do which many result in new inventions and innovations.

Essential Questions: How would you explain technological design and problem solving methods in the development of inventions and innovations?

Concepts: Technological design & problem solving utilizes a series of steps that take place in a well-defined sequence.

Competencies: Employ engineering design and problem solving skills to solve complex technological challenges.

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Curriculum Plan

Time Range in Days: 6-8

Standard(s):

3.4: Technology and Engineering Education

Standards Addressed:

3.4.10. E7

Anchors:

S11.A.1: Reasoning and Analysis

- S11.A.1.1, S11.A.1.2, S11.A.1.3

Overview: Detail drawings are a key element in the over working drawings of a house. They show the internal components of the roof, walls and foundation of the house.

Focus Question(s): What is the importance and purpose of the detail drawing of a house?

Goals: Students will know the names and locations of all of the parts diagramed in a detail drawing

Objectives:

1. Students will reinforce some of the terms learned in unit 2. (DOK 1)
2. Students will identify all of the major components in the structure of a house. (DOK 1)
3. Students will be assessed on their understanding of the elements of a house. (DOK 1)
4. Students will label the parts of a roof, wall and foundation detail drawing. (DOK 1)

Core Activities and Instructional Methods:

1. Discuss the wall details and how the components are used in the construction of a house
 - a. Lecture: wall detail components
2. Label parts of the wall foundation, and roof detail worksheets using the Architecture: Residential Drafting and Design text, pgs. 213-431 chapters 11,12, 13, 14 and 19
 - a. Hands-on: label worksheets

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Assessments:

Diagnostic:

-Oral response to determine student comprehension

Formative:

-Roof, wall and foundation detail worksheets

Summative:

- Roof, wall and foundation detail quizzes

Extensions:

Students that have mastered roof, wall and foundation details and their components will use CAD to create a detail drawing.

Correctives:

Individual instruction and demonstrations will be given to students having difficulty

Materials and Resources

Smart board, computer lab, Auto CAD 2011, detail worksheets, Architecture: Residential Drafting and Design text, and detail quizzes

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UNIT 4: Traditional House Designs

Big Idea # 1: Technology is created used and modified by humans

Essential Questions: What is technological literacy?

Concepts: Technology and society mutually impact each other.

Competencies: Describe how technological development impacts economics, culture, and policies.

Big Idea #2: Technological design is a creative process that anyone can do which many result in new inventions and innovations.

Essential Questions: How would you explain technological design and problem solving methods in the development of inventions and innovations?

Concepts: Technological design & problem solving utilizes a series of steps that take place in a well-defined sequence.

Competencies: Employ engineering design and problem solving skills to solve complex technological challenges.

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Curriculum Plan

Time Range in Days: 10-12

Standard(s):

3.4: Technology and Engineering Education

Standards Addressed:

3.4.10. E7

Anchors:

S11.A.1: Reasoning and Analysis

- S11.A.1.1, S11.A.1.2, S11.A.1.3

Overview: The history and the characteristics of traditional house designs is an essential part of the architectural field.

Focus Question(s): How are the history and characteristics of traditional house designs incorporated into modern architecture?

Goals: Students will be able to identify the different traditional house designs and list their distinguishing characteristics.

Objectives:

1. Students will know the characteristics, which distinguish various types of house designs. (DOK 1)
2. Students will learn the history of various traditional house designs. (DOK 1)
3. Students will learn how to search the web for various types of house designs. (DOK 1)
4. Students will create a portfolio of different house designs. (DOK 4)
5. Students will know how to use Microsoft Publisher to create a portfolio/booklet of the various types of houses. (DOK 2)

Core Activities and Instructional Methods:

1. Students will create a House Design Portfolio to reinforce traditional house design characteristics
 - a. Hands-on: Students will create a portfolio of the various types of houses.
 - i. Students will search the web for various types of house designs and compile a portfolio of different house designs.
 - ii. Use internet to search for images and descriptions of house designs use
 - iii. Microsoft Publisher to create and print a portfolio of designs

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- iv. Each house design will include an image of the specific design, the dates or period when the design was commonly build, heading of the design and a brief description of defining characteristics

Assessments:

Diagnostic: Oral response to determine student comprehension

Formative: Monitor of student progress to assess their competency of the project.

Summative: Design portfolios

Extensions: Students that finish their portfolios early will add additional designs to their portfolios.

Correctives:

Individual instruction and demonstrations will be given to students having difficulty

Materials and Resources

Drafting/CADD, computers, Microsoft Publisher, whiteboard, architecture packet

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UNIT 5: Modern House Design

Big Idea # 1: Technology is created used and modified by humans

Essential Questions: What is technological literacy?

Concepts: Technology and society mutually impact each other.

Competencies: Describe how technological development impacts economics, culture, and policies.

Big Idea #2: Technological design is a creative process that anyone can do which many result in new inventions and innovations.

Essential Questions: How would you explain technological design and problem solving methods in the development of inventions and innovations?

Concepts: Technological design & problem solving utilizes a series of steps that take place in a well-defined sequence.

Competencies: Employ engineering design and problem solving skills to solve complex technological challenges.

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Curriculum Plan

Time Range in Days: 5-6 days

Standard(s):

3.4: Technology and Engineering Education

Standards Addressed:

3.4.10. E7

Anchors:

S11.A.1: Reasoning and Analysis

- S11.A.1.1, S11.A.1.2, S11.A.1.3

Overview: Knowing the over all concept of the four modern house designs is necessary for choosing the proper design for your client.

Focus Question(s): What is the correct modern house choice for your clients needs and wants?

Goals: Students will know how to properly advise their client on a modern house design.

Objectives:

1. Students will know advantages, disadvantages and characteristics of the modern house designs (Ranch, 1 ½ Story, 2 story, and Split Level). (DOK 1)
2. Students will be able to identify the four modern house designs (DOK 1)
3. Students will understand the room layout and traffic circulation of these houses. (DOK 1)

Core Activities and Instructional Methods:

1. Notes (Architecture: Residential Drafting and Design text, pgs. 37-67 chapters 2 and 3),
 - a. Lecture: Students will type their notes directly into their home directories on the computers.

Extensions:

Students will be able to begin work on their final projects as soon as they have completed the software tutorial. This will allow more competent students to develop a much more extensive house design for their final project.

Correctives:

Individual instruction and demonstrations will be given to students having difficult

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Assessments:

Diagnostic:

-Oral response to determine student comprehension

Formative:

-Quiz on modern house design

Summative:

-Final project

Materials and Resources

Smart board, Computers, Microsoft Word, quiz

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UNIT 6: Standard Residential Layout and Design

Big Idea # 1: Technology is created used and modified by humans

Essential Questions: What is technological literacy?

Concepts: Technology and society mutually impact each other.

Competencies: Describe how technological development impacts economics, culture, and policies.

Big Idea #2: Technological design is a creative process that anyone can do which many result in new inventions and innovations.

Essential Questions: How would you explain technological design and problem solving methods in the development of inventions and innovations?

Concepts: Technological design & problem solving utilizes a series of steps that take place in a well-defined sequence.

Competencies: Employ engineering design and problem solving skills to solve complex technological challenges.

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Curriculum Plan

Time Range in Days: 15-18 days

Standard(s):

3.4: Technology and Engineering Education

Standards Addressed:

3.4.10. E7

Anchors:

S11.A.1: Reasoning and Analysis

- S11.A.1.1, S11.A.1.2, S11.A.1.3

Overview: Thorough knowledge of the three areas of a house (sleeping, living and service areas) and proper layout of them is needed to achieve an effective residence.

Focus Question(s): How are the three areas of a house laid out to achieve an effective home?

Goals: Students will be able to layout and design the three areas of modern house to effectively meet the needs and wants of their client.

Objectives:

1. Students will know standards sizes and layout of rooms for their floor plan designs. (DOK 1)
2. Students will identify the three areas of a house (sleeping, service, and living) and the rooms within these areas. (DOK 1)
3. Students will know the correct placement of rooms/areas (sleeping, living, and service areas) in their house design. (DOK 1)
4. Students will understand what traffic circulation. (DOK 1)
5. Students will learn the specific sizes of elements of a house. Such as: doors, windows, hallways, cabinets, fixtures, stairs, appliances, etc... (DOK 1)
6. Students will understand the concept of the working triangle in the kitchen. (DOK 1)

Core Activities and Instructional Methods:

1. Notes: Architecture: Residential Drafting and Design text, pgs. 129-217 chapters 7, 8, and 9. (This book is only a reference not a primary text)
 - a. Lecture, discussion:
 - i. These lectures will be given periodically throughout the semester
 - ii. The lectures will be broken up and placed within the tutorials for the

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- iii. Architecture software. This will break up the monotony of lecturing every day for 16 days.
- iv. Students will type their notes directly into their home directories on the computers.

Assessments:

Diagnostic:

- Oral response to determine student comprehension

Formative:

- Quizzes on room layout and standards

Summative:

- Final project

Extensions:

Students will be able to begin work on their final projects as soon as they have completed the software tutorial. This will allow more competent students to develop a much more extensive house design for their final project.

Correctives:

Individual instruction and demonstrations will be given to students having difficulty

Materials and Resources:

Smart board, Computers, Microsoft Word, quizzes

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UNIT 7: Revit Architectural CAD Software

Big Idea #1: Technological design is a creative process that anyone can do which may result in new inventions and innovations.

Essential Question: How would you explain and apply technological design and problem solving methods in the development of inventions and innovations?

Concepts: Technological design & problem solving utilizes a series of steps that take place in a well-defined sequence.

Competencies: Utilize computer-aided engineering design software to solve advanced, real-world technological problems.

Big Idea #2: Technological literacy is the ability to use, assess and manage technology around us.

Essential Question: What is the importance of technological literacy?

Concepts: Technological literacy is required for all citizens in a democratic society for shared decision-making

Competencies: Use current technological systems efficiently, identify undesirable results, then design, produce, test and utilize engineering analysis to optimize solutions.

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Curriculum Plan

Time Frame: 15-18 days

Standards: Pennsylvania Core State Standards for Science and Technology and Engineering Education

Standards Addressed:

3.4.10.C1, 3.4.12.C2

Anchor(s) or Adopted Anchor(s):

S11.A.2.1, S11.A.2.2

Overview: Revit is an architectural based CAD software that is widely used in the drawing of house designs.

Focus Question(s): What is revit, how is it used and why is it so important to learn how to efficiently use it?

Goals: Students will know how to effectively use Revit to create quality modern house design drawings.

Objectives:

1. Students will be able to identify and utilize the basic tools of the architectural CAD software (Autodesk Revit Builder). (DOK 1)
2. Students will be able to use the information given to them to create a sound residential house design using Revit. (DOK 4)
3. Students will add and edit: walls, doors, windows, roofs, floors, ceilings, and content (furniture). (DOK 4)
4. Students will develop documentation (drawings) of 3D renderings, elevations, scheduling, and floor plans of residential houses. (DOK 4)

Core Activities and Instructional Methods:

1. Students will complete the Autodesk Revit Builder software tutorials. These tutorials will walk them through the construction of house plans from ground up.
 - a. Demonstration: Revit tools
 - b. Hands-on Learning: tutorials

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Assessments:

Diagnostic:

Oral response

Formative:

Tutorials

Summative:

Final project

Extensions:

Advanced students will complete more challenging tutorials and have more time to develop a larger more involved final project

Correctives:

Individual instruction and demonstrations will be given to students having difficulty

Materials and Resources:

Smart board, Computers, CADD lab, netop and Revit Builder architecture software

UNIT 8: Final Project / Applying Design Concepts and CAD Software

Big Idea # 1: Technology is created used and modified by humans

Essential Questions: What is technological literacy?

Concepts: Technology and society mutually impact each other.

Competencies: Describe how technological development impacts economics, culture, and policies.

Big Idea #2: Technological design is a creative process that anyone can do which many result in new inventions and innovations.

Essential Questions: How would you explain technological design and problem solving methods in the development of inventions and innovations?

Concepts: Technological design & problem solving utilizes a series of steps that take place in a well-defined sequence.

Competencies: Employ engineering design and problem solving skills to solve complex technological challenges.

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Curriculum Plan

Time Range in Days: 20-25 days

Standard(s):

3.4: Technology and Engineering Education

Standards Addressed:

3.4.10. E7

Anchors:

S11.A.1: Reasoning and Analysis

- S11.A.1.1, S11.A.1.2, S11.A.1.3

Overview: The information learned the last three units is extremely important and needs to be learned on a mastery level

Focus Question(s): Are students able to use the essential content about the layout and drawing of a house, using Revit, to develop professional quality residential house plans?

Goals: Students will be able to create effective working drawings of a modern residential house design.

Objectives:

1. Students will master their knowledge of residential house design standard. (DOK 4)
2. Students will master proper use of the architectural CADD software Revit Builder. (DOK 4)
3. Students will design and draw their own house design. (DOK 4)

Core Activities and Instructional Methods:

1. Students will begin their final projects when they have finished all of the required tutorials. The project will be a culmination of all of the information they have learned this semester, focusing heavily the information learned in units 6, 7 and 8
 - a. Hands-on learning: final project.

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Assessments:

Diagnostic:

Observe student progress

Summative:

Final project

Extensions:

There is no limitation to the final project. Students will use what they have learned along with their own creativity to develop their designs.

Correctives:

Individual instruction and demonstrations will be given to students having difficulty

Materials and Resources:

Computers, CADD lab, netop and architecture software

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Appendix

Primary Textbook(s) Used for this Course of Instruction

-There are no primary textbooks used in this class

STANDARDS:

Standard Area - 9.1: Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts

Standard - 9.1.12.A Know and use the elements and principles of each art form to create works in the arts and humanities.

Standard - 9.1.12.B Recognize, know, use and demonstrate a variety of appropriate arts elements and principles to produce, review and revise original works in the arts.

3.4. Technology and Engineering Education

3.4.C Technology and Engineering Design

- 3.4.12.C2: Apply the concept that engineering design is influenced by personal characteristics, such as creativity, resourcefulness, and the ability to visualize and think abstractly.

3.4.D Abilities for a Technological World

- 3.4.12.D2: Verify that engineering design is influenced by personal characteristics, such as creativity, resourcefulness, and the ability to visualize and think abstractly.

3.4.E The Design World

- 3.4.10.E7: Evaluate structure design as related to function, considering such factors as style, convenience, safety, and efficiency

ANCHORS:

S11.A.1: Reasoning and Analysis

- S11.A.1.1: Analyze and explain the nature of science in the search for understanding the natural world and its connection to technological systems.
- S11.A.1.2: Identify and analyze the scientific or technological challenges of societal issues; propose possible solutions and discuss implications.

S11.A.1.3: Describe and interpret patterns of change in natural and human-

S11.A.2 Processes, Procedures, and Tools of Scientific Investigations

- S11.A.2.1 - Apply knowledge of scientific investigation or technological design to develop or critique aspects of the experimental or design process.

S11.A.3 Systems, Models, and Patterns

- S11.A.3.1 – Analyze the parts of a simple system, their roles, and their relationships to the system as a whole.

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- **3.4.E The Design World**
 - **3.4.10.E7:** Evaluate structure design as related to function, considering such factors as style, convenience, safety, and efficiency.

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Checklist to Complete and Submit with Curriculum:

- _____ A hard copy of the curriculum using The template entitled "Planned Instruction," available on the district website

- _____ Hard copies of all supplemental resources not available electronically

- _____ The primary textbook form(s)

- _____ The appropriate payment form, in compliance with the maximum curriculum writing hours noted on the first page of this document

- _____ A USB/Flash Drive containing a single file that will print the curriculum in its intended sequence from beginning to end and all supplemental resources that are available in electronic format.

Each principal and/or department chair has a schedule of First and Second Readers/Reviewers. Each Reader/Reviewer must sign & date below.

First Reader/Reviewer Printed Name _____

First Reader/Reviewer Signature _____ Date _____

Second Reader/Reviewer Printed Name _____

Second Reader/Reviewer Signature _____ Date _____