

ART-1070: 3D FOUNDATIONS

Cuyahoga Community College

Viewing: ART-1070 : 3D Foundations

Board of Trustees:

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Academic Term:

Fall 2020

Subject Code

ART - Art

Course Number:

1070

Title:

3D Foundations

Catalog Description:

Introduction to three-dimensional art and design concepts, materials, tools and processes. Through a variety of hand-on projects, students will study the elements and principles of three-dimensional visual design and their application in creative expression.

Credit Hour(s):

3

Lecture Hour(s):

1

Lab Hour(s):

5

Requisites

Prerequisite and Corequisite

None.

Outcomes

Course Outcome(s):

Create projects that use the elements and principles of three-dimensional design individually and comprehensively.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Identify and employ the three-dimensional design elements, including: Line, Form, Plane, Volume, Mass, Space, Texture, Light, Color and Time.
2. Analyze and apply organizing principles of design to create visual unity, including: Contrast, Variety, Balance, Scale, Proportion, Emphasis, Repetition, and Movement.
3. Use three-dimensional design terminology in oral or written activities.

Course Outcome(s):

Create projects that demonstrate appropriate application of the elements and principles of three-dimensional design to solve visual problems and communicate concepts with a variety of materials and processes.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Execute various methods of subtractive, additive, and combination construction techniques with various materials.
2. Experiment with a variety of surface treatment options and material properties.
3. Build on ideas from a sketch through the development of a finished piece.
4. Display a beginning level of integration of artistic concept to form and space.
5. Practice effective problem-solving strategies and techniques.
6. Identify three-dimensional design principles as they pertain to sculptural objects and environments to include time-based installation and media applications.

Course Outcome(s):

Recognize the application of three-dimensional design concepts in the creation of art objects within a broader context.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Identify the elements of three-dimensional design in art objects, architecture and environments.
2. Examine and explain the visual function of the organizing principles of three-dimensional design.
3. Analyze three-dimensional design concepts as related to functional objects and spaces; such as industrial objects and package design, structural and landscape architecture, and media applications.
4. Study and analyze historical and contemporary artists and artworks.
5. Reference relevant historical and contemporary sources to develop one's own formal and conceptual design goals.

Course Outcome(s):

Analyze and evaluate one's own projects, the work of peers, and the artworks of historical and contemporary artists.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Critique artworks: Observe, Describe, Analyze and Evaluate in-progress and completed artworks.
2. Self-Evaluate, peer-evaluate, and contribute to whole-class critiques.
3. Receive and offer constructive feedback.
4. Examine and evaluate historical and contemporary artworks.

Course Outcome(s):

Manage time, materials and equipment effectively and follow proper safety precautions for chemicals, equipment, and processes when creating projects.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Manage time, materials and equipment effectively in the classroom to complete projects safely and on schedule.
2. Use a variety of processes/media to create projects exhibiting a high degree of craftsmanship.
3. Identify best practices and exercise necessary safety precautions with tools, equipment, materials and chemicals.

Methods of Evaluation:

1. Class participation
2. Peer review/group critiques
3. Portfolio of completed projects
4. Sketchbook/journal work
5. Written and oral critiques
6. Examinations
7. Quizzes

8. Research report
9. Exhibition review

Course Content Outline:

1. Studio Policies and Procedures
 - a. Studio set-up and clean-up procedures
 - b. Inventory, storage and usage of general studio equipment, tools and materials
 - c. Time management regarding the art making process
 - d. Studio etiquette
 - e. Safety procedures and hazard information
2. Introduction of the Elements of Three-Dimensional Art and Design
 - a. Line
 - b. Form
 - c. Plane
 - d. Volume
 - e. Mass
 - f. Space
 - g. Texture
 - h. Light and Value
 - i. Color
 - j. Time
3. Introduction of the Organizing Principles of Three-Dimensional Art and Design
 - a. Unity
 - b. Contrast
 - c. Variety
 - d. Balance
 - e. Scale
 - f. Proportion
 - g. Emphasis
 - h. Repetition
 - i. Movement
4. Projects that Introduce a Variety of Three-Dimensional Art Techniques
 - a. Brainstorming, research and idea exploration/development
 - b. Maquette and/or model making
 - c. Subtractive construction techniques: carving
 - d. Additive construction techniques: assemblage, modeling, joinery
 - e. Combinations of construction techniques
 - f. Surface treatments
 - g. Presentation methods: pedestal, floor, suspended, etc.
5. Projects that Introduce a Variety of Three-Dimensional Art Mediums
 - a. Materials vary in classroom facilities and resources at each campus, but may include (but not limited to): wood, stone, metal, wire, clay, fiber, paper, board, plastic, glass, wax, soap, plaster, glues, found or re-purposed objects, and other relevant and available technologies
 - b. Material properties: strength, workability, durability, weight, toxicity, function, cost, and other features or limitations
6. Projects that Engage the Principles of Design
 - a. Application of organizing principles of three-dimensional design
 - b. Use of various techniques and mediums that employ vocabulary and concepts of three dimensional design
 - c. Relation of principles of three-dimensional design to artistic content and expression
 - d. Study examples of historical and contemporary artists and artworks
7. Proper and Safe Equipment Usage and Material Safety Procedures
 - a. Equipment varies in classroom facilities and resources at each campus, but may include: utility knives, hot glue gun, drill, table saw, miter saw, welder, slab roller, 3D printer
 - b. Handling of potentially toxic substances:
 - i. Turpentine
 - ii. Spray paint
 - iii. Rubber

- iv. Resins
 - v. Spray adhesive
 - vi. Rubber cement
- c. Particulate material precautions:
- i. Plaster dust
 - ii. Saw dust
 - iii. Silica dust
8. Critique Completed Coursework, as well the Artworks of Peers and Others
- a. Evaluate craftsmanship in execution
 - b. Analyze formal elements and principles of design
 - c. Explain visual interest, intrigue and/or narrative
 - d. Identify relationships between form and content

Resources

Paul Zelanski, Mary Pat Fisher. *Shaping Space*. 3rd Edition. Belmont, CA: Thomson Wadsworth, 2007.

Mary Stewart. *Launching the Imagination, 3D*. 5th Edition. New York, NY: McGraw-Hill, 2015.

Gail Greet Hannah. *Elements of Design: Rowena Reed Kostellow and the Structure of Visual Relationships*. New York, NY: Princeton Architectural Press, 2002.

Stephen Luecking. *Principles of Three-Dimensional Design: Objects, Space and Meaning*. Upper Saddle River, NJ: Pearson Education, 2002.

Terry Barrett. *Making Art: Form and Meaning*. New York, NY: McGraw-Hill, 2010.

Otto Ocvirk, Robert Stinson, Philip Wigg, Robert Bone, David Clayton. *Art Fundamental: Theory and Practice*. New York, NY: McGraw-Hill, 2012.

Richard Roth, Stephen Pentak. *Design Basics 3D*. Boston, MA: Wadsworth, Cengage Learning, 2013.

Resources Other

1. Additional resource materials as provided by the instructor
2. <http://www.sculpture.org> and/or printed issues of [Sculpture Magazine](#)
3. Online Public Access Catalog (OPAC), Art Indes, OhioLink, World Catalog (OCLC), World Wide Web, web bookmarks

Instructional Services

OAN Number:

Transfer Assurance Guide OAH059

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