

ART M23: THREE-DIMENSIONAL DESIGN

Originator

cminet

Co-Contributor(s)**Name(s)**

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Lizee, Erika (elizee)

Zucca, Gerardo (gzucca)

College

Moorpark College

Discipline (CB01A)

ART - Art

Course Number (CB01B)

M23

Course Title (CB02)

Three-Dimensional Design

Banner/Short Title

Three-Dimensional Design

Credit Type

Credit

Start Term

Fall 2023

Catalog Course Description

Provides foundation level understanding of the elements and principles of three-dimensional design. Teaches design elements and principles in both theory and practical applications through specific weekly three-dimensional projects using a variety of materials.

Taxonomy of Programs (TOP) Code (CB03)

1002.00 - Art (Painting, Drawing, and Sculpture)

Course Credit Status (CB04)

D (Credit - Degree Applicable)

Course Transfer Status (CB05) (select one only)

A (Transferable to both UC and CSU)

Course Basic Skills Status (CB08)

N - The Course is Not a Basic Skills Course

SAM Priority Code (CB09)

E - Non-Occupational

Course Cooperative Work Experience Education Status (CB10)

N - Is Not Part of a Cooperative Work Experience Education Program

Course Classification Status (CB11)

Y - Credit Course

Educational Assistance Class Instruction (Approved Special Class) (CB13)

N - The Course is Not an Approved Special Class

Course Prior to Transfer Level (CB21)

Y - Not Applicable

Course Noncredit Category (CB22)

Y - Credit Course

Funding Agency Category (CB23)

Y - Not Applicable (Funding Not Used)

Course Program Status (CB24)

1 - Program Applicable

General Education Status (CB25)

Y - Not Applicable

Support Course Status (CB26)

N - Course is not a support course

Field trips

Will not be required

Grading method

(L) Letter Graded

Alternate grading methods

(O) Student Option- Letter/Pass

(P) Pass/No Pass Grading

Does this course require an instructional materials fee?

No

Repeatable for Credit

No

Is this course part of a family?

No

Units and Hours

Carnegie Unit Override

No

In-Class

Lecture

Minimum Contact/In-Class Lecture Hours

17.5

Maximum Contact/In-Class Lecture Hours

17.5

Activity

Laboratory

Minimum Contact/In-Class Laboratory Hours

105

Maximum Contact/In-Class Laboratory Hours

105

Total in-Class

Total in-Class

Total Minimum Contact/In-Class Hours

122.5

Total Maximum Contact/In-Class Hours

122.5

Outside-of-Class

Internship/Cooperative Work Experience

Paid

Unpaid

Total Outside-of-Class

Total Outside-of-Class

Minimum Outside-of-Class Hours

35

Maximum Outside-of-Class Hours

35

Total Student Learning

Total Student Learning

Total Minimum Student Learning Hours

157.5

Total Maximum Student Learning Hours

157.5

Minimum Units (CB07)

3

Maximum Units (CB06)

3

Student Learning Outcomes (CSLOs)

Upon satisfactory completion of the course, students will be able to:

- | | |
|---|---|
| 1 | demonstrate creative and critical thinking, with an awareness and sensitivity to individual and cultural differences, as they research, produce, analyze and evaluate works of art. |
| 2 | demonstrate foundation level understanding of the elements and principles of three-dimensional design and their application in hands-on projects in varied media. |
| 3 | identify the elements and principles of design and demonstrate their roles in relation to three-dimensional design vocabulary and works of art. |

Course Objectives

Upon satisfactory completion of the course, students will be able to:

- | | |
|---|--|
| 1 | demonstrate an understanding of the elements of three-dimensional design: line, plane, mass/form, space, value, texture, and color. |
| 2 | apply the organizing principles of three-dimensional design: unity/variety, balance, contrast, rhythm, economy, scale/proportion and emphasis/focal point. |
| 3 | critique own and other students' solutions to specific projects and offer creative suggestions. |
| 4 | demonstrate an understanding of the unique properties of varied materials through the creation of constructed three-dimensional projects. |

5	demonstrate an understanding of the influences of a diverse range of artworks and artistic movements, throughout historical and contemporary art, including those from the traditional Western canon, non-Western cultures, and underrepresented groups.
6	demonstrate creativity and sensitivity as they research, produce, analyze and critique works of art, while maintaining an awareness of diversity, equity and inclusion.

Course Content

Lecture/Course Content

5% I. Materials, Tools, and Practices

- A. Class Objectives and Workload
- B. Overview of historical and contemporary examples of sculpture, architecture, and commercial applications of three dimensional design such as fashion, industrial design, product design, etc.
- C. Use of tools and materials
- D. Definition of construction methods
 - 1. Additive
 - 2. Subtractive
 - 3. Replicated
 - 4. Assembled
- E. Axes (vertical, horizontal, diagonal, X,Y,Z)

15% II. Construction in Line

- A. Definition: (Rectilinear, Curvilinear, Gestural, Thickness/Gauge, Implied)
- B. Relationships to positive/negative space, and balance.
- C. Possible materials may include, but not limited to: wire, string, glue, hair, yarn, etc.
- D. Possible assignments may include, but not limited to:
 - 1. Replicate an object in wire
 - 2. Group or individual project using string
 - 3. Create an insect out of wire

15% III. Construction in Plane:

- A. Definition: (rectilinear/flat, concave, convex, undulating, oblique, bevelled)
- B. Possible materials may include, but not limited to: foam core, cardboard, metal, wood, paper
- C. Possible assignments may include, but not limited to:
 - 1. Construction of an architectural tower out of foam core using limited materials
 - 2. Construction of a high/low relief out of planar materials
 - 3. Group project using planar materials to create an urban design
 - 4. Construction of a pop-up book, 2D to 3D

15 % IV. Construction in Form:

- A. Definition: (geometric solids, mass, implied, hollow, and actual weight)
- B. Relationships to positive/negative space, balance, base
- C. Possible materials may include, but not limited to: water-based clay, polymer clay, paper maché, wood, metal, paper, etc.
- D. Possible assignments include:
 - 1. self-portrait hat out of clay
 - 2. extruded clay construction
 - 3. constructed form using only one 2 x 4 x 96 inches piece of wood

15% V. Construction in Digital Manufacturing

- A. Definition of design-based thinking process: empathize, define, ideate, prototype, test, repeat
- B. Techniques may include but not limited to: 3D modeling, 3D printing, laser-cutting, CNC routing, vacuum-forming, casting
- C. Possible assignments may include but not limited to:
 - 1. design furniture using Tinkercad
 - 2. design an object using Blender or ZBrush, or other 3D modeling software
 - 3. Role play designer/client relationship and create a project to specifications using laser cutting

15% VI. Explorations of Self, Site, and/or Interactivity

- A. Definitions and Examples
- B. Possible subjects may include, but not limited to:
 - 1. Site Specific Works
 - 2. Landscape Art
 - 3. Textiles
 - 4. Wearable Art
 - 5. Interactive Art
 - 6. Symbolic Use of Materials
- C. Possible Materials may include, but not limited to: fabric, repurposed materials, wire, wood, paper, clay, etc.
- D. Possible assignments may include, but not limited to:
 - 1. wearable self-portrait sculpture from textiles and varied materials
 - 2. interactive project out of wood

3. site specific piece using varied materials
4. textile project to contain metaphorical baggage

5% VII. Principles of Design

1. Definitions and Examples of:

- A. Balance
- B. Emphasis
- C. Repetition
- D. Economy
- E. Movement
- F. Variety
- G. Scale/Proportion

5% VIII. Elements of Design

1. Definitions and examples of:

- a. Space - positive and negative
- b. Shape
- c. Line
- d. Value
- e. Texture
- f. Color
- g. Form
- h. Plane

5% IX. Cognitive Meaning and Content

A. Cognitive meaning – beginning-level investigation of the intellectual, symbolic, emotional, thematic and narrative aspects of a work of art

B. Content - beginning-level investigation of meaning derived from the materials, forms, and techniques used in the creation of a work of art, in conjunction with cognitive meanings and outside knowledge knowledge

5% X. Artistic Inspiration

Present a diverse range of artworks and artistic movements throughout historical and contemporary art, including those from the traditional Western canon, non-Western cultures and underrepresented groups as inspiration for course assignments and projects.

Laboratory or Activity Content

Practice and application of lecture content:

5% I. Materials, Tools, and Practices

- A. Class Objectives and Workload
- B. Overview of historical and contemporary examples of sculpture, architecture, and commercial applications of three dimensional design such as fashion, industrial design, product design, etc.
- C. Use of tools and materials
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 1. Additive
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1. Definitions and Examples of:

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- C. Repetition
- D. Economy
- E. Movement
- F. Variety
- G. Scale/Proportion

5% VIII. Elements of Design

1. Definitions and examples of:

- a. Space - positive and negative
- b. Shape
- c. Line
- d. Value
- e. Texture
- f. Color
- g. Form
- h. Plane

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5% X. Artistic Inspiration

Study a diverse range of artworks and artistic movements throughout historical and contemporary art, including those from the traditional Western canon, non-Western cultures and underrepresented groups as inspiration for course assignments and projects.

Methods of Evaluation

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

- Written expression
- Skills demonstrations

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

- Essay exams
- Group projects
- Individual projects
- Objective exams
- Portfolios

Problem-solving exams
 Research papers
 Skills demonstrations
 Written analyses
 Classroom Discussion
 Projects
 Participation

Instructional Methodology

Specify the methods of instruction that may be employed in this course

Distance Education

Describe specific examples of the methods the instructor will use:

Instructor will give a PowerPoint presentation to describe the course content along with YouTube videos and activity demonstrations.

Instructor will demonstrate how to build geometric forms out of wire.

Instructor will lead class critique discussions and analysis of student artwork.

Representative Course Assignments

Writing Assignments

Write a critique of 3D designs presented by fellow students. Writing to include design strengths, design weaknesses, analysis of related principles/elements of design.

Write a short paper describing and evaluate sculptures seen in a sculpture exhibit.

Write a reflection on education, artistic and career goals.

Critical Thinking Assignments

Create sketches for furniture design.

Design a three-dimensional building model to scale out of foam-core for a local, currently vacant lot.

Design a three-dimensional model of shoe constructed out of cardboard or wire.

Reading Assignments

Selected readings from periodicals on contemporary art, such as Sculpture Magazine, Art in America, etc.

Selected readings on artist/designers from websites such as Hyperallergic, Wired.com, and/or gallery/museum websites such as Ursula from Hauser & Wirth, or Louisiana Art Museum .

Skills Demonstrations

Demonstrate an ability to handle tools and materials safely.

Demonstrate an ability to use linear materials to describe and enclose form.

Outside Assignments

Representative Outside Assignments

Create work outside of class, such as sketches and architectural three-dimensional modeling.

Research visual resources and idea development for 3D projects to be worked on during lab hours. Example research projects may include Architecture Design, Furniture Design, Shoe Design.

Articulation

C-ID Descriptor Number

ARTS 101

Status

Approved

Equivalent Courses at 4 year institutions

University	Course ID	Course Title	Units
Cal Poly San Luis Obispo	ART 104	Art and Design Foundation Studies II	4
CSU Northridge	ART 141	Beginning Three-Dimensional Design	3
CSU Dominguez Hills	ART 171	3-D Composition	3

Comparable Courses within the VCCCD

ART R180 - 3-D Foundations
 ART V19 - Three-Dimensional Design

District General Education**A. Natural Sciences****B. Social and Behavioral Sciences****C. Humanities****D. Language and Rationality****E. Health and Physical Education/Kinesiology****F. Ethnic Studies/Gender Studies****Course is CSU transferable**

Yes

CSU Baccalaureate List effective term:

F1999

CSU GE-Breadth**Area A: English Language Communication and Critical Thinking****Area B: Scientific Inquiry and Quantitative Reasoning****Area C: Arts and Humanities****Area D: Social Sciences****Area E: Lifelong Learning and Self-Development****Area F: Ethnic Studies****CSU Graduation Requirement in U.S. History, Constitution and American Ideals:****UC TCA**

UC TCA

Approved

IGETC

Area 1: English Communication

Area 2A: Mathematical Concepts & Quantitative Reasoning

Area 3: Arts and Humanities

Area 4: Social and Behavioral Sciences

Area 5: Physical and Biological Sciences

Area 6: Languages Other than English (LOTE)

Textbooks and Lab Manuals

Resource Type

Textbook

Classic Textbook

Yes

Description

Pentak, Stephen, Richard Roth, and David A. Lauer. *Design Basics: 2D and 3D*. 8th ed., Cengage, 2013.

Lauer, David, and Stephen Pentak. *Design Basics*. 9th ed., Cengage, 2015.

Resource Type

Textbook

Classic Textbook

Yes

Description

Ocvirk, Otto, et al. *Art Fundamentals: Theory and Practice*. 12th ed., McGraw-Hill, 2012.

Resource Type

Textbook

Classic Textbook

Yes

Description

Zelanski, Paul, and Mary Fisher. *Shaping Space: The Dynamics of Three-Dimensional Design*. 3rd ed., Cengage, 2006.

Resource Type

Textbook

Classic Textbook

Yes

Description

Herbst, Frederic. *3D Design Studio Handbook*. E-book, SUNY Press, 2019, <https://sunypress.edu/Books/9/3D-Design-Studio-Handbook>. Accessed 18 Jan 2023.

Library Resources

Assignments requiring library resources

Research using the library's print and online resources.

Sufficient Library Resources exist

Yes

Example of Assignments Requiring Library Resources

Research, using the Library's print and online resources, on topics such as ideas for the imaginative design of a shoe.

Distance Education Addendum**Definitions****Distance Education Modalities**

100% online

Faculty Certifications

Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.

Yes

Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents.

Yes

Regular Effective/Substantive Contact**100% online Modality:**

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Regular Asynchronous discussion boards will be used to encourage discussion among students where they can compare and contrast/discuss /identify and analyze elements of course outcomes. Other Discussion boards will also be used for Q&A, and general class discussion by students and instructor to facilitate student learning outcomes.
E-mail	Email, class announcements and tools such as "Message Students Who" and "Assignment Comments" in Canvas will be used to regularly communicate with all students to clarify class content, remind of upcoming assignments, and provide immediate feedback to students on coursework to facilitate student learning outcomes. Students will be given multiple ways to email instructor through Canvas inbox and faculty provided email account through their own canvas email and school email.
Other DE (e.g., recorded lectures)	Recorded lectures, Narrated Slides, Screencasts, Instructor created content, Discussions, 3rd Party (Publisher) Tools, Websites and Blogs, Multimedia (YouTube, Films on Demand, 3CMedia, Khan Academy, etc.)
Synchronous Dialog (e.g., online chat)	Communication, Online office hours, Online group discussions.

Primary Minimum Qualification

ART

Review and Approval Dates**Department Chair**

11/17/2022

Dean

11/17/2022

Technical Review

01/19/2023

Curriculum Committee

2/7/2023

DTRW-I

MM/DD/YYYY

Curriculum Committee

MM/DD/YYYY

Board

MM/DD/YYYY

CCCCO

MM/DD/YYYY

Control Number

CCC000430935

DOE/accreditation approval date

MM/DD/YYYY