

*Lecture Contact Hours: 24-27; Outside-of-Class Hours: 48-54;
Laboratory Contact Hours: 72-81; Outside-of-Class Hours: 0;
Total Student Learning Hours: 144-162*

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

Art 129 – Three-Dimensional Design

1.5 hours lecture, 1.5 units
4.5 hours laboratory, 1.5 units
Total units: 3

Catalog Description

Three-Dimensional Design is an introduction to the principles of three-dimensional composition. The course emphasizes the elements and principles of design as fundamental tools for visual expression and communication. Visual, tactile, and conceptual approaches to defining space are explored through studio projects. Historical and contemporary perspectives examine how artists and designers shape cultural meaning through form. This course is intended for beginning students and does not require prior experience with tools or equipment.

Prerequisite

None

Course Content

- 1) Theory and practice of design as applied to three-dimensional space, such as the organization of form, structure, and spatial relationships.
- 2) Elements of three-dimensional design, such as line, plane, mass, volume, texture, color, and value.
- 3) Principles of design as applied to three-dimensional form, such as balance, unity, variety, rhythm, repetition, proportion, emphasis, scale, contrast, and continuity.
- 4) Spatial concepts and relationships, such as open and enclosed space, positive and negative space, multiple viewpoints, and the interaction of two-dimensional and three-dimensional elements.
- 5) Compositional strategies for visual communication in three dimensions, such as the arrangement of form to convey meaning, hierarchy, and visual clarity.
- 6) Tools, materials, and methodologies used in constructing three-dimensional work, such as additive and subtractive processes, basic fabrication techniques, and safe and appropriate use of media and equipment.
- 7) Creative problem-solving processes in three-dimensional design, such as research, idea development, sketching, prototyping, and revision.
- 8) Analytical and evaluative approaches to three-dimensional design, such as critique methods, interpretation of design choices, and application of discipline-specific vocabulary in written and oral formats.
- 9) Historical and contemporary developments in sculpture and three-dimensional design, such as global perspectives on cultural, social, and political influences in aesthetic production.
- 10) Analysis of the roles three-dimensional designers play in visual culture, such as how artists and designers communicate ideas and influence social, cultural, and political contexts.

Course Objectives

Students will be able to:

- 1) Analyze and apply the elements and principles of design in three-dimensional works, such as line, plane, mass, volume, balance, proportion, and unity.
- 2) Apply principles of three-dimensional composition to create visually coherent designs, such as organizing form, space, and visual hierarchy.

- 3) Construct three-dimensional projects using appropriate materials and processes, such as additive and subtractive methods, and basic fabrication techniques.
- 4) Select and calculate the materials and equipment required to execute design projects, including determining scale, quantities, and structural needs.
- 5) Employ a range of problem-solving strategies in the development of three-dimensional work, such as research, ideation, sketching, prototyping, and revision.
- 6) Evaluate and revise three-dimensional compositions through critical analysis and self-assessment, such as refining formal, conceptual, and technical aspects of design.
- 7) Articulate design choices, processes, and intentions using appropriate visual art vocabulary in written and oral formats.
- 8) Analyze how visual hierarchy, structure, and complexity influence viewer perception in three-dimensional works.
- 9) Participate in and evaluate group critiques, such as interpreting and assessing one's own and others' work using discipline-specific criteria.
- 10) Apply safe, appropriate use of tools, materials, and studio practices in constructing three-dimensional work.

Method of Evaluation

A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in subject matter determined by multiple measurements for evaluation, one of which must be essay exams, skills demonstration or, where appropriate, the symbol system.

- 1) Studio demonstrations and preparation and final exam project which measure students' ability to employ and demonstrate the elements and principles of design.
- 2) Exams, quizzes, critiques and/or writing prompts which measure students' ability to analyze and respond to sensory information through the language and skills unique to the visual arts.
- 3) Exams, quizzes, critiques and/or writing prompts which measure students' ability to analyze, assess, and derive meaning from works of art, including their own original work, according to the elements of art, the principles of design, and aesthetic qualities.

Special Materials Required of Student

Students may be required to purchase safety goggles, ~~equipment such as face shields, welding gloves,~~ ear protection, ~~safety shoes,~~ and specific materials necessary to complete each assignment.

Minimum Instructional Facilities

- 1) Smart classroom: Studio classroom, equipped with LCD projection from standard computer video output and outfitted with tools and equipment to support a range of three-dimensional fabrication processes. Adequate lighting, electric power with GFI circuits, sinks with traps, environmental controls (heating and air conditioning), dust removal and ventilation, emergency telephone, and secured storage areas are required.
- 2) Audiovisual: Digital presentation equipment and computers capable of displaying, capturing, and editing images and video related to student design projects.

Method of Instruction

- 1) Lecture and demonstration
- 2) Group discussion
- 3) Individual instruction
- 4) Field trips

Out-of-Class Assignments

- 1) **Readings:** lecture notes, course materials, textbook chapters, articles, books, essays, manuals, and content on websites.
- 2) **Writing:** discussions, reflections, assignment drafts in sketchbooks, project outlines, presentations, and content for projects.

- 3) **Other:** field exercises including visits to historic sites and museums, portfolio of artworks, exercises and projects.

Texts and References

- 1) Required (representative examples):
 - a. Jackson, P. *How to Think About Design in the Third Dimension*. Laurence King Publishing, London, UK. 2024.
 - b. Sweeney, R. *Paper Sculpture: Fluid Forms*. Schiffer Craft, 2021.
 - c. Elam, K. *Introduction to Three-Dimensional Design: Principles, Processes, and Projects (Design Brief)*. Princeton Architectural Press, 2020.
 - d. Saar, B., and Cochran, S., *Still Tickin'*. Scottsdale Museum of Contemporary Art. 2017.
 - e. Stewart, M., *Launching the Imagination*. 5th edition. McGraw-Hill, 2014.
- 2) Supplemental: Films, handouts and other references as assigned

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1) Create three-dimensional designs that demonstrate and apply both the principles of design and the elements of art.
- 2) Articulate complex relationships between major works or significant individuals in art, from various historical periods, and their cultural, historical, and economic contexts.
- 3) Evaluate and critically analyze works of art in individual and peer-to-peer settings.