THEA 160: COMPUTER AIDED DESIGN FOR THEATRE

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Spring 2023
Credits:	4
Total Contact Hours:	108
Lecture Hours :	54
Lab Hours:	54
Hours Arranged:	0
Outside of Class Hours:	108
Total Student Learning Hours:	216
Strongly Recommended:	THEA 120.
Transferable to CSU:	Yes
Transferable to UC:	No
Grading Method:	Standard Letter

Catalog Course Description

Entertainment design and technical production with an emphasis on the computer as a design and drafting tool. Applications include Vectorworks and Sketch-up. 54 lecture hours, 54 lab hours.

Course Objectives

- By participating in in-class discussion and quizzes, students will analyze the relationship of the designer with the production team in order to understand their role with producers, directors, clients and the design team.
- Through in-class discussions and practical projects the student will analyze with budgetary limitations how to construct a design to meet most of the clients' needs in order to prepare the student to design within boundaries set by business contracts.
- Through assigned projects, the student will experiment and combine various architectural styles in order to create a cohesive design that is aesthetically pleasing.
- Through in-class discussions and practical projects, the student will examine how each technical production area functions and combines to create a design in order to demonstrate the need for collaboration to achieve a successful production.
- Through practical projects the student will design and draft with the computer an industrial set and a theatrical set to evaluate the approach and challenges that come from designing in different venues with different conceptual ideas in order to prepare the student to be flexible and resourceful at a moment's notice.
- Through the implementation of practical projects, the student will construct a virtual world, a three dimensional design in order to examine and solve the challenges of assembling that design in a real world environment.
- Through practical projects involving various computer drafting schemes, the student will assess the organization of each drawing as it pertains to relaying the design ideas in such a way as to estimate the clearest way to layout those drawings in order to communicate its content to other production members.

Major Course Content

1. Identify the Relationship of the Designer with the Rest of the Production Team
2. Dissect the Positive and Negative Uses of Computer Aided Design
3. Comprehend the Uses of Tool within Vectorworks and Sketch-up
4. Use Basic Drafting Techniques
5. Create and Edit Two Dimensional Objects within the Software
6. Draft, Using Vectorworks, a Groundplan of the Student's Bedroom
7. Create and Edit Three Dimensional Objects within the Software

Lab Content

Guided instruction in...

1. CAD tool identification
2. drawing layout and implimentation.
3. 2D extrusion
4. 3D virtual world construction
5. 3D virtual world manipulation
6. reading stage lighting plots.
7. reading scenic design plans.
8. creating a walkthrough movie
9. 2D design tools
10. 3D texture design tools

Suggested Reading Other Than Required Textbook

Vectorworks Essentials Tutorial Manual Jonathan Pickup Nemetschek Vectorworks, Inc.; 5th edition (2012)

Examples of Required Writing Assignments

3-5 page papers expressing design approach for multiple projects.

Examples of Outside Assignments

Interview of Design and Productions companies and their use of CAD in their business.

Instruction Type(s)

Lab, Lecture, Online Education Lab, Online Education Lecture