APTECH 75 Course Outline as of Fall 2024

CATALOG INFORMATION

Dept and Nbr: APTECH 75   Title: 3D LAYOUT LIGHT (RVPA)
Full Title: 3D Layout and Lighting (RVPA)
Last Reviewed: 1/22/2024

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total		
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled		52.50
Minimum	3.00	Lab Scheduled	0	8	Lab Scheduled		0
		Contact DHR	0		Contact DHR		0
		Contact Total	3.00		Contact Total		52.50
		Non-contact DHR	0		Non-contact DHR		0

Total Out of Class Hours: 105.00   Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable
Grading: Grade Only
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:
Formerly:

Catalog Description:
Students will learn dynamic composition and visual development by building backgrounds and environments and using camera angles and perspective to stage effective layouts; they will also apply storytelling elements, research, lighting, color theory, and basic design principles to created work.

This is a Regional Virtual Production Academy (RVPA) course that is not offered at SRJC but is available through one or more of the other five participating colleges of the RVPA collaborative program. Learn more about the RVPA at https://cs.santarosa.edu/vp

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Students will learn dynamic composition and visual development by building

backgrounds and environments and using camera angles and perspective to stage effective layouts; they will also apply storytelling elements, research, lighting, color theory, and basic design principles to created work.

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Prerequisites/Corequisites:
Recommended:
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

				Effective:	Inactive:
AS Degree:	**Area**			Effective:	Inactive:
CSU GE:	**Transfer Area**			Effective:	Inactive:
IGETC:	**Transfer Area**			Effective:	Inactive:
CSU Transfer:	Transferable	Effective:	Fall 2024	Inactive:	
UC Transfer:		Effective:		Inactive:	

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Plan and construct designs.
2. Construct a three-dimensional (3D) environment using a major 3D software application.
3. Create and describe conceptual visualizations for an animated story that use color, lighting, and composition within a major 3D software application.

Objectives:
At the conclusion of this course, the student should be able to:
1. Research appropriate references to aid in conceptual design to build an environment.
2. Create and describe conceptual visualizations for a story that uses color, lighting, and composition.
3. Utilize basic compositing techniques in image-editing software to combine render passes and layers.
4. Analyze the perception of actual light and apply it to 3D environments.

Topics and Scope:

I. Analyzing Research, Storyboards, and Character Designs to Create Conceptual Visualizations
II. Designing Environments and Compositing Tools

III. Study of Lighting and Setting Up Lighting Models Based on Different Rendering Engines
IV. Design Thinking
   A. Presentations and group feedback
   B. Approaches to problem-solving
V. Create Concept Visualizations
VI. Design and Create Environments
VII. Create Lighting Rigs within a Set and Setting up Different Scenarios

Assignment:

1. Video viewing with written critiques
2. Hands-on projects
3. Research with note-taking
4. Presentations
5. Final exam

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Video viewing with written critiques; Research notes	Writing 5 - 15%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Hands-on projects; Presentations	Problem solving 65 - 80%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None	Skill Demonstrations 0 - 0%

Exams: All forms of formal testing, other than skill performance exams.

Final exam	Exams 5 - 30%

Other: Includes any assessment tools that do not logically fit into the above categories.

Participation	Other Category 0 - 5%

Representative Textbooks and Materials:
The Five C's of Cinematography. Mascelli, Joseph V. Silman-James Press. 1998 (classic)
Autodesk Maya 2020: A Comprehensive Guide. 12th ed. Tickoo, Sham. Purdue Univ. and CADCIM Technologies. 2020
Instructor prepared materials