

COURSE OUTLINE

Dimension Fundamentals

Course Description

ID 106. Dimension Fundamentals. 3 credit hours. This course will enable the student to explain and use the basic principles of three-dimensional design (3D) using Adobe Photoshop, Adobe Dimension, and various other software applications. The student will utilize Adobe Dimension to demonstrate the process and creation of visual 3D assets and complete 3D environments used in detail mock-ups, product proof of concepts, and virtual environments.

Required Materials

For complete material(s) information, refer to <https://bookstore.butlercc.edu>

Subscription to Adobe Creative Cloud. Butler Community College is an Adobe Creative Campus and all students are able to download the Adobe Creative Cloud for free and use it as long as you are a registered student. Please see the External Software Page in your introductory module in your classes Canvas modules.

Butler-Assessed Outcomes

The intention is for the student to be able to do the following:

1. Apply design processes to 3D creations and composite projects.
2. Demonstrate fundamental skills in Adobe Dimension.

Learning PACT Skills that will be developed and documented in this course

Through involvement in this course, the student will develop ability in the following PACT skill area(s):

Technology Skills

- Discipline-specific technology - Through preparation of assigned projects, the student will develop specific skills using 3D rapid production design and production software.

Major Summative Assessment Task(s)

These Butler-assessed Outcome(s) and Learning PACT skill(s) will be demonstrated by the following:

1. Designing and creating specified projects that demonstrate the ability to apply 3D views and media design for the creation of 3D prototypes and concept creations using Adobe Dimension.

Learning Units

- I. Adobe Dimension
 - A. Introduction
 - B. Saving and exporting

- II. Design Mode
 - A. Creating a new project
 - B. Starter assets
 - C. Canvas
- III. Changing views
 - A. Camera usage
 - B. Presets
 - C. Orbit and Pan tool
 - D. Dolly and Horizon tool
- IV. Render Mode
 - A. What is rendering?
 - B. Real-time rendering
 - C. Blended renders
 - D. Render export formats
- V. Utilizing 3D assets
 - A. Models
 - B. Materials creation
 - C. Material application
 - D. Basic shape creation
- VI. Working with text
 - A. Creating text
 - B. Editing text
- VII. Dimension functions
 - A. Selections
 - B. Graphic application
 - C. Backgrounds
 - D. Lights and lighting
- VIII. UV Mapping
 - A. Viewing UV's
 - B. Using UV's
 - C. Generating UV's
- IX. Exporting
 - A. Models
 - B. Scenes
- X. Post processing
 - A. Adobe Photoshop
 - B. AR enabling and rendering

Learning Activities

Learning activities will be assigned to assist the student in achieving the intended learning outcomes through lectures, class discussions, team research, individual research, readings, viewing tutorials and study material, quizzes, tests, and other activities at the discretion of the instructor. These activities may be either face-to-face or online.

Grade Determination

The student will be graded on the learning activities and assessment tasks. Grade determinations may include the following: class participation, projects, team and individual participation, research assignments, quizzes, tests, and other methods of evaluation at the discretion of the instructor.