

**NorthWest Arkansas Community College  
Business & Computer Information Systems Division**

## **CAD Department Course Outline**

### **DRFT 2333 – Advanced 3D Modeling (F)**

***Catalog Description:***

This course provides students with the tools necessary to master 3D modeling commands in AutoCAD. Topics include user coordinate systems, constructing 3D wireframes, surface modeling, constructing solid primitives, developing and editing solid models, rendering, animation, and displaying models as a 2D drawing.

***Prerequisites:***

DRFT 1234, DRFT 2154

***Credit hours/Contact Hours/Load hours:***

3/3/3

***Target Audience/Transferability:***

This course is one of the foundation courses and is required for all degree options in CAD. DRFT 2333 is non-transferable.

***Student Learning Outcomes:***

Students will:

- Define User Coordinate Systems as needed to construct solid models
- Create primitive and composite solid models of objects
- Edit details of solid models using 3D edit commands
- Edit faces, edges, and bodies of solid models
- Place light sources in model and apply rendering options
- Create a 2D drawing from a 3D model

***Topics:***

- Constructing models using 3D coordinate systems
- User Coordinate System (UCS)
- Solid model construction with primitives
- Creating complex solid models
- Editing solid models and faces
- Creating a solid model assembly of parts
- Lights, rendering, and creating surface finishes
- Adding animation to your model

***Forms of Assessment:***

- Drawing assignments
- Portfolio of semester work with reflection
- Final Project submitted electronically

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