

# COMP 1001 3D MODELLING FUNDAMENTALS

**Credit Points** 10

**Legacy Code** 301164

**Coordinator** Tomas Trescak ([https://directory.westernsydney.edu.au/search/name/Tomas Trescak/](https://directory.westernsydney.edu.au/search/name/Tomas%20Trescak/))

**Description** This unit will introduce the fundamentals of 3D surface modelling. Students will learn the theory of 3D surface modelling and will gain practical skills in creating 3D assets using a popular software package from Autodesk. They will also learn how to design characters and how to integrate their assets with a purpose of producing complex 3D scenes and animated movies. This unit is aimed at students who have no prior knowledge of 3D modelling and are not familiar with associated software packages.

**School** Computer, Data & Math Sciences

**Student Contribution Band** HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 1 subject

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Design 3D models
2. Review and implement the key principles of various 3D surface modelling techniques
3. Design, render and animate visual scenes
4. Develop transferable conceptual skills in relation to modelling 3D content and animations.

## Subject Content

3D Surface Modelling (LowPoly and HighPoly/ Sculpting)

Texturing and Shading  
Rigging and Animation  
Simulation and Effects  
Lighting and Rendering

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/ Group Task
Workshop Portfolio - Each portfolio will result in a 3D scene to be delivered	- 5 screenshots with work in progress - 5 screenshots of final model - Maya source files	50	N	Individual

Major Assignment - Students are expected to produce a complex 3D scene and build an animation around this scene	- 5 screenshots with work in progress - 5 screenshots of final model - Maya source files	50	N	Individual
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Teaching Periods

## 2022 Semester 1 Parramatta - Victoria Rd Day

**Subject Contact** Tomas Trescak ([https://directory.westernsydney.edu.au/search/name/Tomas Trescak/](https://directory.westernsydney.edu.au/search/name/Tomas%20Trescak/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=COMP1001\\_22-AUT\\_PS\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=COMP1001_22-AUT_PS_D#subjects))