UNSW Course Outline

DDES1110 3D Visualisation 1: 3D Virtual Objects - 2024

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General Course Information

Course Code : DDES1110
Year : 2024
Term : Term 3
Teaching Period : T3
Is a multi-term course? : No
Faculty : Faculty of Arts, Design and Architecture
Academic Unit : School of Art & Design
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : Paddington
Campus : Paddington
Study Level : Undergraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This foundation studio course will develop your understanding of creative 3D computer visualisation. It will provide you with live, hands-on experience of the key technologies and creative thinking that is required when designing 3D virtual objects. You will be introduced to the

historical and contemporary developments in 3D Visualisation and Computer Generated Imagery (CGI). Practical studio workshops will explore 3D CGI workflow for a variety of digital media, 3D modelling techniques, the application of foundational art and design theoretical thinking, and the previsualisation and planning of a virtual object. The course will primarily focus on constructing virtual objects for pre-rendering screen-based output. At the end of the course you will have planned and created a 3D virtual object through the application of a series of techniques and methods, giving you an introductory experience of the field of computer modelling.

Course Aims

This course is the first course within the 3D Visualisation disciplinary specialisation studio in the Bachelor of Design program. The aim of the course is to provide a foundational understanding of creative led 3D modelling and visualisation processes for digital media output, giving students introductory knowledge of computer modelling and realising 3D virtual objects.

Relationship to Other Courses

This course is a prerequisite for DDES2110 and DDES2111

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Establish foundational self-directed previsualisation and data gathering processes to create a 3D virtual object.
CLO2 : Apply 3D Computer Generated Imagery workflow from planning to execution.
CLO3 : Communicate a foundation level understanding of theoretical and conceptual thinking when working in the field of creative-led 3D computer visualisation.

Course Learning Outcomes	Assessment Item
CLO1 : Establish foundational self-directed previsualisation and data gathering processes to create a 3D virtual object.	• Previsualisation: Narrative and Data Gathering
CLO2 : Apply 3D Computer Generated Imagery workflow from planning to execution.	• Object 3D Visualisation
CLO3 : Communicate a foundation level understanding of theoretical and conceptual thinking when working in the field of creative-led 3D computer visualisation.	• Realisation and Reflection

Learning and Teaching Technologies

Moodle - Learning Management System

Learning and Teaching in this course

Lectures are provided in-person in this course. Attendence in lectures is expected. All tutorials are in-person and feedback is provided in-class. Participation in weekly in-class activities, completion of weekly assigned homework activitiies, completion of assessments to expected standards. In-class and written feedback for assessment tasks will be provided by tutors.

Additional Course Information

An integral part of this course is engagement with in-class activities and homework observed as an on-going tutorial and project process update to be shared in class. You must actively participate in classes and complete all set work to a satisfactory standard as discussed with your tutor. Students are expected to undertake all research for their projects outside studio hours, seeking guidance from teaching staff in class time, and dedicate sufficient amount of time per week outside of scheduled class activities, for reading, skill development and design development (research, analysis, sketching, making, prototyping). Satisfactory skills in prototyping software such as Adobe XD and/or Figma are required for this course. While software is not taught in-class, learning resources are provided to students throughout as homework activities.

Important note on the use of AI in this course

This course requires both text and visual content to be designd and presented as original output. This involves creative planning and implementing design ideas. The use of AI generated material should be avoided as much as possible and may be permitted **only if ALL of the following prerequisites are met**:

- Generated material has been used in the **early stages** of the design process to aid in your design development
- Any use of AI **MUST** be cited as a footnote in submitted material (where, what, and how, i.e. prompt(s) used)
- A clear indication **MUST** be provided of how your use of AI has developed into evolving an original outcome, evidenced and documented as part of your process diary, and/or expanded in citations/footnotes

Please note, if the outputs of generative AI platforms form a part of your submission beyond initial ideation coming from your process diary and have not been properly documented or

cited, it may be regarded as serious academic misconduct and subject to standard penalties; which may include 00FL, suspension, and exclusion.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Previsualisation: Narrative and Data Gathering Assessment Format: Individual	30%	Start Date: Not Applicable Due Date: Week 4: 30 September - 06 October Post Date: 04/10/2024 11:30 PM
Object 3D Visualisation Assessment Format: Individual Short Extension: Yes (3 days)	50%	Start Date: Not Applicable Due Date: Week 11: 18 November - 24 November Post Date: 20/11/2024 11:30 PM
Realisation and Reflection Assessment Format: Individual Short Extension: Yes (2 days)	20%	Start Date: Not Applicable Due Date: Week 11: 18 November - 24 November Post Date: 20/11/2024 11:30 PM

Assessment Details

Previsualisation: Narrative and Data Gathering

Assessment Overview

Using research and previsualisation skills, you are asked to reimagine an everyday object through the lens of a particular design movement examined in class and communicate your research process. Feedback will be provided on a regular basis in studio through discussion with peers and tutors. Summative assessment and feedback will be provided digitally based on the rubric.

Course Learning Outcomes

- CLO1 : Establish foundational self-directed previsualisation and data gathering processes to create a 3D virtual object.

Detailed Assessment Description

See moodle for detailed assessment brief

Submission notes

Submit on Moodle via Assessments Hub > Assessment 1

Assessment information

See Moodle for detailed assessment brief

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

Simple Editing Assistance

In completing this assessment, you are permitted to use standard editing and referencing functions in the software you use to complete your assessment. These functions are described below. You must not use any functions that generate or paraphrase passages of text or other media, whether based on your own work or not.
If your Convenor has concerns that your submission contains passages of AI-generated text or media, you may be asked to account for your work. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.
For more information on Generative AI and permitted use please see here.

Object 3D Visualisation

Assessment Overview

Using Autodesk Maya, you will create a 3D virtual model and completed renders of a 3D scene. The final model will be fully resolved: UV mapped, textured, lighting added and rendered. As you progress through the course you will also post weekly gallery screen shots of your work. Feedback will be provided on a regular basis in studio through discussion with peers and tutors. Summative assessment and feedback will be provided digitally based on the rubric.

Course Learning Outcomes

- CLO2 : Apply 3D Computer Generated Imagery workflow from planning to execution.

Detailed Assessment Description

See Moodle for detailed assessment brief

Submission notes

Submit on Moodle via Assessments Hub > Assessment 2

Assessment information

See Moodle for detailed brief

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.
For more information on Generative AI and permitted use please see here.

Realisation and Reflection

Assessment Overview

You will produce a 5-minute video with visual aids and voice-over presentation that includes research, experiments, and techniques that you have applied to your Assessment Task 1 and Assessment Task 2. You will also include a personal reflection on project outcomes. Feedback will be provided on a regular basis in studio through discussion with peers and tutors. Summative assessment and feedback will be provided digitally based on the rubric.

Course Learning Outcomes

- CLO3 : Communicate a foundation level understanding of theoretical and conceptual thinking when working in the field of creative-led 3D computer visualisation.

Detailed Assessment Description

You will create a 5-minute video with visual aides /slides and voice-over presentation must include personal reflections with experiments and techniques discussed. Students will also communicate how they might improve their individual outcomes and the lessons learned for any future 3D visualisation projects. All students are required to prepare visual material to support their presentation.

Assessment Length

5 minutes

Submission notes

Submit on Moodle via Assessments Hub >Assessment 3

Assessment information

See Moodle for detailed brief

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.
For more information on Generative AI and permitted use please see here.

General Assessment Information

Reference responsibly and avoid plagiarism

All work created in response to the assessment brief should be your own original work, created for this course, and cannot be recycled from elsewhere including your own prior work. Any images or writing included in the assessable document that have been previously published by you (as a submitted assessment or otherwise), or are not your own (for example, precedents, theories, quotes etc.) should be correctly cited using an appropriate referencing style such as Harvard, Oxford, or APA.

Plagiarism is taking the ideas, words, images, designs or objects of others and passing them off as your own. Plagiarism is a type of intellectual theft. Plagiarism can take many forms, including deliberately cheating, accidentally copying from a source without acknowledgement, and re-using your own work that has already been submitted for assessment without proper citation. Plagiarism can have serious consequences, so it is important that students be aware of what it is, and how to avoid it. All written submissions are automatically checked for plagiarism using the Turnitin site. For more information please see student.unsw.edu.au/plagiarism/integrity.

The use of AI if not properly cited and documented (i.e. how it has helped support your design process) may also be considered plagiarism.

Grading Basis

Standard

Requirements to pass course

Class attendance is advised. Complete all assessments and contribute to the weekly Moodle galleries.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 9 September - 15 September	Studio	Introduction to 3d Visualisation 1
	Homework	Completion of Week 1 class tutorial.
Week 2 : 16 September - 22 September	Studio	3D Modelling 1
Week 3 : 23 September - 29 September	Studio	3D Modelling 1 (and textures)
Week 4 : 30 September - 6 October	Studio	3d Modelling 3 (Hard edge modelling)
	Assessment	Assessment 1 Due Friday 11:55pm Week 4. Upload assessment to Moodle Assessment 1 link.
Week 5 : 7 October - 13 October	Studio	UV Mapping
Week 6 : 14 October - 20 October	Other	Study Week
	Homework	Keep working on your Assessment 2 project and save screen shots of your progress.
Week 7 : 21 October - 27 October	Studio	Texturing workflows
Week 8 : 28 October - 3 November	Studio	Digital Sculpting
Week 9 : 4 November - 10 November	Studio	Intro to Lighting and Rendering
Week 10 : 11 November - 17 November	Studio	Advanced Rendering
Week 11 : 18 November - 24 November	Assessment	No Class- Assessment 2 and Assessment 3 Due Assessment 2 Due Week 11 - Wednesday 11:55 PM Assessment 3 Due Week 11 - Friday 11:55 PM

Attendance Requirements

Attendance Requirements

Students are expected to attend all classes for each course in which they are enrolled. Failure to attend and participate in at least 80% of learning activities such as discussions, peer feedback, studio sessions, online activities, group work, etc., may result in you being flagged as at risk of failing the course. By punctually attending and actively participating in your classes you not only increase your own opportunities for developing your skills and knowledge, but will also help build a rigorous and engaged creative community with other students. If you are unable to attend classes, please inform your relevant Course Convenor. If the absence is for medical reasons, you will be required to present a medical certificate. If absences impact your ability to undertake assessment, then you should apply for Special Consideration.

General Schedule Information

There is no class in Week 11

Course Resources

Prescribed Resources

Course Evaluation and Development

This course is improved each term by student feedback coming from official myExperience surveys.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Anna Tow		Art & Design		By apppointment. Please email.	No	Yes

Other Useful Information

Academic Information

For essential student information relating to:

- UNSW and Faculty policies and procedures;
- Student Support Services;
- Student equity and disability;
- Special Consideration in the event of illness or misadventure;
- Examination information;
- Review of results;

Please see: https://www.unsw.edu.au/arts-design-architecture/student-life/resources-support/protocols-guidelines

Academic Honesty and Plagarism

Plagiarism is using the words or ideas of others and presenting them as your own. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement.

UNSW groups plagiarism into the following categories:

- Copying: Using the same or very similar words to the original text or idea without acknowledging the source or using quotation marks. This includes copying materials, ideas

or concepts from a book, article, report or other written document, presentation, composition, artwork, design, drawing, circuitry, computer program or software, website, internet, other electronic resource, or another person's assignment without appropriate acknowledgement.
- Inappropriate paraphrasing: Changing a few words and phrases while mostly retaining the original information, structure and/or progression of ideas of the original without acknowledgement. This also applies in presentations where someone paraphrases another's ideas or words without credit and to piecing together quotes and paraphrases into a new whole, without appropriate referencing.
- Collusion: Working with others but passing off the work as a person's individual work. Collusion also includes providing your work to another student for the purpose of them plagiarising, paying another person to perform an academic task, stealing or acquiring another person's academic work and copying it, offering to complete another person's work or seeking payment for completing academic work.
- Inappropriate citation: Citing sources which have not been read, without acknowledging the "secondary" source from which knowledge of them has been obtained.
- Duplication ("self-plagiarism"): Submitting your own work, in whole or in part, where it has previously been prepared or submitted for another assessment or course at UNSW or another university.

The UNSW Academic Skills support offers resources and individual consultations. Students are also reminded that careful time management is an important part of study. One of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and proper referencing of sources in preparing all assessment items. UNSW Library has the ELISE tool available to assist you with your study at UNSW. ELISE is designed to introduce new students to studying at UNSW, but it can also be a great refresher during your study.

Completing the ELISE tutorial and quiz will enable you to:

- analyse topics, plan responses and organise research for academic writing and other assessment tasks
- effectively and efficiently find appropriate information sources and evaluate relevance to your needs
- use and manage information effectively to accomplish a specific purpose
- better manage your time
- understand your rights and responsibilities as a student at UNSW
- be aware of plagiarism, copyright, UNSW Student Code of Conduct and Acceptable Use of UNSW ICT Resources Policy
- be aware of the standards of behaviour expected of everyone in the UNSW community
- locate services and information about UNSW and UNSW Library

Use of AI for assessments

As AI applications continue to develop, and technology rapidly progresses around us, we remain committed to our values around academic integrity at UNSW. Where the use of AI tools, such as ChatGPT, has been permitted by your course convener, they must be properly credited and your submissions must be substantially your own work.

In cases where the use of AI has been prohibited, please respect this and be aware that where unauthorised use is detected, penalties will apply.

Use of AI for assessments | UNSW Current Students

Submission of Assessment Tasks

Assessment tasks must be submitted electronically via either Turnitin or a Moodle assignment. In instances where this is not possible, alternative submission details will be stated on your course's Moodle site. For information on how to submit assignments online via Moodle: https://student.unsw.edu.au/how-submit-assignment-moodle

Late Submission Penalty

UNSW has a standard late submission penalty of:

- 5% per calendar day,
- for all assessments where a penalty applies,
- capped at five calendar days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Students are expected to manage their time to meet deadlines and to request Special Consideration as early as possible before the deadline. Support with Time Management is available here.

Important note: UNSW has a "fit to sit/submit" rule, which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit to do so and cannot later apply for Special Consideration. This is to ensure that if you feel unwell or are faced with significant circumstances beyond your control that affect your ability to study, you do not sit an examination or submit an assessment that does not reflect your best performance. Instead, you should apply for Special Consideration as soon as you realise you are not well enough or are otherwise unable to sit or submit an assessment.

School-specific Information

Risk of Failure Warnings

If you are at risk of failing the course, because of lack of attendance, low marks in assignments, failing to submit assignments, or lack of participation or engagement, you may be notified by email. Please ensure you read your university email, and respond to any official risk of failure warning promptly. NOTE – if the warning email is sent to your UNSW e-Mail address, it is considered as being read by you whether you check your UNSW email or not.

Late Submission Penalties

If you believe that circumstances will prevent you from submitting an assessment on time, please notify your course convenor as soon as possible. There will be penalties applied for being late and a clear 'no later than' date beyond which submission won't be accepted. Where a Special Consideration is not applied for, and a student assessment is late, the following guidelines apply:

1. Up to 5 days after due date, a penalty of 5% (of maximum mark for assignment) will be applied for each day late (e.g. an assignment that is 3 days late would have its mark reduced by 15%). Please note - for the purpose of deduction calculation, a 'day' is each 24-hour period (or part thereof) past the stipulated deadline for submission within the calendar year (including weekends and public holidays). Task with a percentage mark - If the task is marked out of 100%, late submission will attract a deduction of 5% from the mark awarded to the student for every 24-hour period (or part thereof) past the stipulated deadline.

Example: A student submits an essay 48 hours and 10 minutes after the stipulated deadline. The essay is marked out of 100%. A 3 day late penalty will be applied (3 x 5% = 15%). The essay receives a mark of 68%. The student's mark will therefore be reduced to 53% (68% - 15%).

2. Beyond 5 days late, no submission will be accepted.

Special Consideration

Please note that the University's Special Consideration process allows students to apply for an extension within 3 days of the assessment due date. This provides for more extensive extensions, subject to documentation, and Course Convenor approval. You can apply for special consideration online through my.UNSW.edu.au. More information about special consideration can be found here: https://www.student.unsw.edu.au/special-consideration

NOTE: If you are experiencing issues related to your access to class material or difficulty with technology, make sure you notify your lecturer as soon as possible, well before any assessment due date. Last minute requests for extensions due to computer failure, file corruption, printing problems etc. do not qualify students for special consideration or extensions. Students are expected to maintain regular backups of their work at all times.

Educational adjustments

Educational adjustments can be applied to assessments if you are living with a disability, a long term medical condition, a mental health condition, and/or are a carer of individuals with a disability. The Equitable Learning Service (ELS) determines adjustments based on medical documentation and communicates these via an Equitable Learning Plan (ELP). To receive educational adjustments for equitable learning support, you must first register with Equitable Learning Services (ELS). More information about Equitable Learning Services can be found here https://student.unsw.edu.au/els

Supplementary Assessment

Supplementary assessments are available to students in this course who have failed an assessment but have subsequently had an application for Special Consideration approved by the university. The supplementary assessment may take a different form than the original assessment and will be defined by the course convenor - but it will address the same learning outcomes as the original assessment. If Special Consideration has not been awarded, the maximum mark that may be awarded for a supplementary assessment is 50% of the full assessment mark.

Academic Honesty and Plagiarism

Plagiarism is taking the ideas, words, images, designs or objects of others and passing them off as your own. Plagiarism is a type of intellectual theft. Plagiarism can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. Plagiarism can have serious consequences, so it is important that students be aware of what it is, and how to avoid it. All written submissions are automatically checked for plagiarism using the Turnitin site. For further information, please see the Academic Integrity & Plagiarism website https://www.student.unsw.edu.au/plagiarism.

Referencing Requirements for Assessments

Your course convenor will inform you what referencing system this course follows. Useful guidelines on how to reference according to various systems can be found at: https://student.unsw.edu.au/referencing.

You may follow these guidelines in your assessment tasks, or seek additional advice from your lecturer. Styles for Endnote are downloadable from the Endnote website. Accurate and correct referencing is an important academic prerequisite at University level, and if your work does not meet these requirements, it may be marked down, or in more serious cases, it may be treated as an instance of plagiarism and academic dishonesty.

Use of Generative AI

As AI applications continue to develop, and technology rapidly progresses around us, we remain committed to our values around academic integrity at UNSW. Your work must be your *own* and where the use of AI tools, such as ChatGPT, have been permitted by your course convener, they must be properly credited and your submissions must be substantially your own work. In cases where the use of AI has been prohibited, please respect this and be aware that where unauthorised use is detected, penalties will apply. If in doubt, please seek advice from the Course Convenor prior to using generative AI tools.

https://www.student.unsw.edu.au/assessment/ai

Health and Safety

Ensuring student and staff health and safety is very important at UNSW Art & Design. Health and safety is everyone's responsibility. As a student, you have a responsibility not to do anything that risks your own health and safety, or the health or safety of your fellow students, staff members or visitors. This means, for example, exiting the building during a fire drill; wearing personal protective equipment and clothing (PPEC) when staff or signage instructs you to do so; undertaking induction to using equipment or carrying out processes that require specific knowledge; and reporting hazards or incidents to your lecturer or supervisor as soon as you become aware of them. For more information, please see https://safety.unsw.edu.au/.

Additional Support and Resources

At UNSW you can also find support and resources if you need help with your personal life, getting your academic success on track or just want to know how to stay safe. See https://www.student.unsw.edu.au/wellbeing.

Additional support for students is available by contacting the following centres:

- Student Support and Development https://www.student.unsw.edu.au/support
- Student Support Advisors: https://www.student.unsw.edu.au/advisors
- Mental Health Support: https://www.student.unsw.edu.au/mental-health-support
- Academic Skills and Support https://www.student.unsw.edu.au/skills
- UNSW IT Service Centre https://www.myit.unsw.edu.au/
- Student Gateway: https://www.student.unsw.edu.au/
- Equitable Learning Services: https://www.student.unsw.edu.au/equitable-learning
- Faculty Resources and Support: https://www.unsw.edu.au/arts-design-architecture/student-life/resources-support
- Arc: https://www.arc.unsw.edu.au/

After Hours Access to the Paddington Campus

The core operating hours for the Paddington Campus are below. All students have access to the campus during these hours:

- Monday to Friday 0800 – 2100
- Saturday 0900 – 1700

Some students are permitted to have “After Hours Access” (AHA) to the campus upon completion of a series of inductions. The inductions are dependent on location, as well as the types of activities undertaken in those locations. The first of these is this Primary Induction, and this must be completed online https://my.artdesign.unsw.edu.au. All students requiring AHA are required to complete this induction. The Primary Induction gives access to the following Low Risk areas:

Post Graduate Students

- PG Research students – Level 4 F Block, Computer Labs and Learning Commons
- Master of Design students – Level 3 D Block, Computer Labs and Learning Commons
- Master of Curating and Cultural Leadership students – D207, Computer Labs and Learning Commons

Honours Students

- Fine Arts – Level 3 F Block, Computer Labs and Learning Commons
- Design – Level 1 E Block, Computer Labs and Learning Commons
- Media Arts – Level 3 F Block, Computer Labs and Learning Commons

Subsequent inductions are workshop and lab specific, and are conducted face-to-face by the UNSW Art & Design Technical staff. Students and staff must first successfully complete the

Primary Induction before requesting a Workshop/Lab specific Induction.

School Contact Information

UNSW School of Art & Design

Faculty of Arts, Design & Architecture

Paddington Campus

Cnr Greens Rd & Oxford Street

Paddington NSW 2021

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