UNSW Course Outline

DART2213 Introduction to Motion Capture - 2024

Published on the 20 May 2024

General Course Information

Course Code : DART2213
Year : 2024
Term : Term 2
Teaching Period : T2
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 studio elective introduces you to Motion Capture technologies and processes that digitally capture human movement for use in moving image, animation, visual effects, game production, and numerous other related media arts applications. You will gain theoretical and practical

experience with motion capture through a series of studio exercises, enabling you to experiment with these processes in your own media arts practice. The course is designed for those with prior experience in 3D animation and visualisation, and has an emphasis on collaborative, group-based learning in media arts studio environments. In this supportive studio environment, you will be encouraged to experiment with new approaches and concepts, further expanding the potentials of your media arts practice.

Course Aims

This course aims to provide students with knowledge of and first hand experience in directing Motion capture.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Apply motion capture production processes and techniques to create media arts projects
CLO2 : Explore the construction of meaning in media arts contexts by experimenting with motion capture processes and techniques
CLO3 : Work collaboratively to develop and deliver a media arts project integrating motion capture principles, workflows, and production techniques
CLO4 : Analyse and reflect on creative processes, workflows, and outcomes that use motion capture in media arts contexts

Course Learning Outcomes	Assessment Item
CLO1 : Apply motion capture production processes and techniques to create media arts projects	• Motion Capture Proposal • Motion Capture Project
CLO2 : Explore the construction of meaning in media arts contexts by experimenting with motion capture processes and techniques	• Documentation and Reflection • Motion Capture Proposal • Motion Capture Project
CLO3 : Work collaboratively to develop and deliver a media arts project integrating motion capture principles, workflows, and production techniques	• Motion Capture Project
CLO4 : Analyse and reflect on creative processes, workflows, and outcomes that use motion capture in media arts contexts	• Documentation and Reflection • Motion Capture Proposal • Motion Capture Project

Learning and Teaching Technologies

Moodle - Learning Management System

Learning and Teaching in this course

Learning and teaching in this course is driven by Universal Design for Learning (UDL) principles alongside activities to drive student belonging and engagement. Students are asked to attend courses each week in order to engage in community building activities and ways of learning that can not be experienced completely online. Alternatively if you have accessiblity requirements, please contact the course tutor or Equitable Learning Services https://www.student.unsw.edu.au/equitable-learning .

The classes are run as practice based lab environment, simulating real world visual effects, animation and motion capture environment. You are encouraged to turn up each week and operate in a professional lab environment, as a team member.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Motion Capture Proposal Assessment Format: Individual Short Extension: Yes (3 days)	40%	Due Date: 17/06/2024 05:00 PM
Motion Capture Project Assessment Format: Group Short Extension: Yes (3 days)	30%	Due Date: 19/07/2024 11:59 PM
Documentation and Reflection Assessment Format: Individual Short Extension: Yes (3 days)	30%	Due Date: 05/08/2024 11:59 PM

Assessment Details
Motion Capture Proposal

Assessment Overview

For this assessment, you will create a proposal detailing and documenting specifications for a motion capture project as well as the research which informed your ideas and plans.

Formative feedback will be provided in class and summative feedback will be provided digitally, based on the assessment rubric.

Course Learning Outcomes

- CLO1 : Apply motion capture production processes and techniques to create media arts projects
- CLO2 : Explore the construction of meaning in media arts contexts by experimenting with motion capture processes and techniques
- CLO4 : Analyse and reflect on creative processes, workflows, and outcomes that use motion capture in media arts contexts

Detailed Assessment Description

See Moodle for Assessment brief

Submission notes

Submit via Moodle to Assessments Hub - "Submit here > Assessment 1"

Assignment submission Turnitin type

This is not a Turnitin assignment

Motion Capture Project

Assessment Overview

For this assessment, you will work in groups to create a project utilising motion capture processes and techniques.

Formative feedback will be provided in class and summative feedback will be provided digitally, based on the assessment rubric.

Course Learning Outcomes

- CLO1 : Apply motion capture production processes and techniques to create media arts projects
- CLO2 : Explore the construction of meaning in media arts contexts by experimenting with motion capture processes and techniques
- CLO3 : Work collaboratively to develop and deliver a media arts project integrating motion capture principles, workflows, and production techniques
- CLO4 : Analyse and reflect on creative processes, workflows, and outcomes that use motion capture in media arts contexts

Detailed Assessment Description

See Moodle for Assessment brief

Submission notes

Submit via Moodle to Assessments Hub - Submit here > Assessment 2

Assignment submission Turnitin type

This is not a Turnitin assignment

Hurdle rules

Assessment 1 is a hurdle for this assessment.

Documentation and Reflection

Assessment Overview

For this assessment, you will create a portfolio that documents your conceptual, technical, and iterative contributions to the group project. You are encouraged to articulate and expand on your individual contributions to the project, as well as reflect on the teamwork and collaboration involved, identifying what worked well and areas for improvement in future projects.

Formative feedback will be provided in class and summative feedback will be provided digitally, based on the assessment rubric.

Course Learning Outcomes

- CLO2 : Explore the construction of meaning in media arts contexts by experimenting with motion capture processes and techniques
- CLO4 : Analyse and reflect on creative processes, workflows, and outcomes that use motion capture in media arts contexts

Detailed Assessment Description

See Moodle for Assessment brief

Assessment Length

1000

Submission notes

Submit via Moodle to Assessment 3 < SUBMIT HERE

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Hurdle rules

Assessment 1 and 2 are hurdles for this assessment as you are required to reflect upon those

assessments and the content of the 10 weeks of class.

General Assessment Information

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 0 : 20 May - 26 May	Other	O-Week
Week 1 : 27 May - 2 June	Laboratory	Week 1: Introduction to Motion capture. Lecture and Tutorial This lecture and tutorial will be run in the Blackbox space D103. You will be introduced to the course content including assessment tasks, course outline and online content. You will be shown the motion capture studio basics such as camera and character calibration and the imporance of work health safety (WHS).
Week 2 : 3 June - 9 June	Lecture	Week2: Motion capture lab Lecture and Tutorial This lecture and tutorial will be run in the Blackbox space D103. You will learn techniques associated with running a live production motion capture studio in the black box. This involves creating an effective volume, generating a production volume and directing actors.
Week 3 : 10 June - 16 June	Laboratory	Week3: Bending data, abstract motion capture. Lecture and Tutorial: Motion capture now and abstract possibilities. Bringing data into 3D and generating abstract outcomes. Week 3 onwards is a lecture and tutorial in a lab environment in D-Block. Weeks 8 and 9 are back in the Blackbox D103.
Week 4 : 17 June - 23 June	Laboratory	Week4: Alternative methods of capture and generation. Lecture and Tutorial: Alternative methods of capture, bringing data into 3D and generating abstract outcomes.
	Assessment	Assessment 1 is due
Week 5 : 24 June - 30 June	Experiment	Week 5: Experimentation and Project generation Lecture and Tutorial: Working in a group you will work in various tools to generate unique visual content using data you have captured.
Week 6 : 1 July - 7 July	Other	Study week.
Week 7 : 8 July - 14 July	Laboratory	Week7: introduction to Motion builder basics.
Week 8 15 July - 21 July	Laboratory	Week 8: Assessment 2 screenings and feedback in class. This weeks class is in the Black D103 again. Lecture and Tutorial: You will be asked to screen and discuss your Assessment 2 projects in class.
	Assessment	Assessment 2 is due.
Week 9 : 22 July - 28 July	Laboratory	Week 9: Mocap Studio This weeks class is in the Black D103 again.
Week 10 : 29 July - 4 August	Laboratory	Week 10: Advanced Animation Techniques in maya and MOBU Lecture and Tutorial: You will work on advanced animation techniques in Motion Builder and Maya including: how to create a story using cut scenes, retargeting animation and editing character animation with motion capture data.

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](#).

Course Resources

Prescribed Resources

Please see Moodle for prescribed resources for the course.

Software used in this course include Autodesk Maya 2024, Motionbuilder 2024 and Adobe Photoshop.

Maya, Motionbuilder and Photoshop all have minimum system requirements to run.

Motionbuilder is only available on PC and also has system requirements to run. See: https://www.autodesk.com/support/technical/article/caas/sfdcarticles/sfdcarticles/System-requirements-for-Autodesk-Motionbuilder-2024.html

Maya : https://www.autodesk.com/support/technical/article/caas/sfdcarticles/sfdcarticles/System-Requirements-for-Autodesk-Maya-2024.html#:~:text=Operating System,10, version 1809 or higher

Adobe Photoshop: https://helpx.adobe.com/au/photoshop/system-requirements.html

Students are encouraged to work in the UNSW Art and Design labs outside of class time if they do not have a PC with the above software and minimum technical specifications.

Recommended Resources

Please see Moodle for recommended resources for the course.

Additional Costs

Additional costs may be in the form of software licenses such as Adobe Suite if your student license has expired.

Motionbuilder is only available on PC and also has system requirements to run. See "Prescribed Resources".

Course Evaluation and Development

Formative feedback is provided in class during the session and students are encouraged to show work in progress to tutors and peers. Summative feedback will be provided as written feedback

for assessments 1 and 3 or verbal assessment in class for assessment 2.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	June Kim		G-Block		Email to arrange a time to meet	No	Yes
	Karen Kriss					No	No

Other Useful Information

Academic Information

Due to evolving advice by NSW Health, students must check for updated information regarding online learning for all Arts, Design and Architecture courses this term (via Moodle or course information provided).

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

- UNSW and Faculty policies and procedures;
- Student Support Services;
- Dean's List;
- review of results;
- credit transfer;
- cross-institutional study and exchange;
- examination information;
- enrolment information;
- Special Consideration in the event of illness or misadventure;
- student equity and disability;

And other essential academic information.

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

Turnitin Submission

If you encounter a problem when attempting to submit your assignment through Turnitin, please telephone External Support on 9385 3331 or email them on externalteltsupport@unsw.edu.au

Support hours are 8:00am – 10:00pm on weekdays and 9:00am – 5:00pm on weekends (365 days a year). If you are unable to submit your assignment due to a fault with Turnitin, you may apply for an extension, but you must retain your ticket number from External Support (along with any other relevant documents) to include as evidence to support your extension application. If you email External Support, you will automatically receive a ticket number, but if you telephone, you will need to specifically ask for one. Turnitin also provides updates on their system status on Twitter.

Generally, 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.

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

ad.generaladmin@unsw.edu.au