

COURSE CONTENT

Course Code	DM2000
Course Title	Interactive I
Pre-requisites	NIL
No of AUs	3
Contact Hours	39 hours studio contact

Course Aims

Interactive I introduce students to the fundamental principles of interactivity in order for them to be applied to designing interactive art, media, or design projects. You will get an overview of modes of interaction, the core elements of interactivity, input, processing and output, and their relationship to each other, you will explore examples of interactive projects, and analyse the concepts behind them as well as their semiotics and aesthetics. You will gain practical experience in applying this knowledge in developing your own interactive project. This learning will provide a foundation for more advanced studies in DM2007 Interactive 2, and other interactive projects in design and media.

Intended Learning Outcomes (ILO)

By the end of the course, students should be able to:

1. Identify core strategies used to develop a concept for an interactive media project.
2. Demonstrate basic techniques to author interactive media projects.
3. Apply knowledge of developing an interactive media project in a specific context.
4. Reflect on personal strategies used to employ interactivity on a project.
5. Analyze concepts and methods used by peers in making of an interactive project.

Course Content

Modes of interaction

Introduction to the importance of user participation in interactive media. Overview of the modes of interaction including implicit (passive, indirect) and explicit (active, direct) interaction. Identifying the following relational nodes in an interactive media project: user - object, user - user and object - object. Differences between active and passive interaction explored in relationship with semiotics of interaction.

Structure of Interactive project

Analysis of three core elements of the interactive media project: input, processing and output. Introduction to the relationship between these elements and their influence on each other.

Semiotics of Interactive Media

Discussions on meaning of action and participation(input) in relationship with the audio-visual system responses (output) in interactive media projects. Identifying and comparison of processing as another core element with other two (input, output).

Designing interactions and role of prototyping

Identifying and developing conceptual frameworks for an interactive media project. The

importance of the development and design of a project prototype. You will prototype ideas in order to experience your interaction designs before they go to the production stage.

Developing and producing interactive projects

Identifying and project development through the following stages of interactive media production (in chronological order): development of a project demo, adjustment of the project goals and outcomes, production, postproduction.

Class assignments

One core interactive media project that enables students to identify the following parts of an interactive media project: input, processing and output. The medium of project can be, but it is not limited to: interactive object, screen, website, game, projection, performance, soundscape, etc. Developed through self-directed learning with guidance, assisted with lectures, tutorials, class exercises, and peer/instructor feedback sessions.

Assessment (includes both continuous and summative assessment)

Component	ILO Tested	Programme LO	Weighting	Team/ Individual
Continuous Assessment Ideation and concept development Project Demo	1,2	--	30	Individual
Final Project: Interactive media project	1,2,3,4	--	50	Individual
Continuous Assessment: Participation	5	--	20	Individual
Total			100%	

Reading and References

1. Dunne, Anthony, and Fiona Raby. *Speculative Everything: Design, Fiction, and Social Dreaming*. MIT, 2014.
2. Bush, Vannevar. "As We May Think." *The Atlantic*, Atlantic Media Company, 13 Mar. 2018, www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/.
3. McLuhan, Marshall. *Understanding Media: the Extensions of Man*. The MIT Press, 2013.
4. Paul, Christiane. *Digital Art*. Thames & Hudson, 2015.
5. Manovich, Lev. *The Language of New Media*. MIT Press, 2001.
6. Reas, Casey, and Ben Fry. *Processing: a Programming Handbook for Visual Designers and Artists*. MIT Press, 2007.
7. Wiener, N. *Cybernetics: or the Control and Communication in the Animal and the Machine*. MIT Press, 1961.

Course Policies and Student Responsibilities

(1) General

You are expected to complete all assigned readings, activities, assignments, attend all classes punctually and complete all scheduled assignments by due dates. You are expected to take responsibility to follow up with assignments and course related announcements. You are expected to participate in all project critiques, class discussions and activities.

(2) Punctuality

You are expected to be punctual for all classes. If you are more than 30 minutes late, you will be deemed as absent and will not be able to sign on the attendance register.

(3) Absenteeism

In-class activities make up a significant portion of your course grade. Absence from class without a valid reason will affect your participation grade. Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies. There will be no make-up opportunities for in-class activities.

Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain of the definitions of any of these terms, you should go to the [academic integrity website](#) for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

Planned Weekly Schedule*

*Subject to adjustment by instructor according to the teaching situation, students' progress, public holidays and unforeseeable circumstances. A revised schedule will be issued to students at the start of the semester.

Week	Topic	Course LO	Readings/ Activities
1	Modes of interaction Introduction to the importance of user participation in interactive media. Overview of the modes of interaction including implicit (passive,	1,2, 3, 5	Introductory Lecture In-class discussion on personal favourites in interactive media Assigned Project 1: Develop a concept for an interactive

	indirect) and explicit (active, direct) interaction. Identifying the following relational nodes in an interactive media project: user - object, user - user and object - object. Differences between active and passive interaction explored in relationship with semiotics of interaction.		project (Interactive installation, device, space, screen, game, etc.)
2-3	<p>Structure of Interactive project</p> <p>Analysis of three core elements of the interactive media project: input, processing and output. Introduction to the relationship between these layers and their influence on each other.</p>	1,2, 3, 5	<p>Lectures on Interactive media structure: input, processing, output.</p> <p>Presentation of the first project.</p> <p>Critique and feedback. Discussion on modes of interaction. Identifying feasibility of the project and potential to be developed during one semester. Visualizing the concept and understanding the importance of prototyping.</p> <p>Assigned Project 2:</p> <p>Develop a prototype for the selected interactive media project idea</p> <p>Presentation of the prototype</p> <p>Critique and feedback.</p> <p>Discussion on possibilities of making this into a real project.</p>
4-8	<p>Semiotics of Interactive Media</p> <p>Discussions on meaning of action and participation(input) in relationship with the audio-visual system responses (output) in interactive media projects. Identifying and comparison of processing as another core element with other two (input, output).</p> <p>Designing interactions and role of prototyping</p> <p>Identifying and developing conceptual frameworks for an interactive media project. The importance of the development and design of a project prototype. Student will prototype their ideas in order to experience their interaction designs before they go to the production stage.</p>	1, 2, 3, 5	<p>Lectures on:</p> <ul style="list-style-type: none"> - Art and technology projects - Experimental approach to art making - New Media Art <p>In-class exercise Concept development in a team. Swap your project ideas and modifying them based on your personal interest</p> <p>Assigned Project:</p> <p>Project 2: Project Prototype based on your concept, create a project prototype which will visualize your idea.</p> <p>This project can be executed with the use of any analog as well as digital media/tools.</p> <p>Project consultation Concept development</p>

			<p>Project Critique Project demo</p> <p>Student Presentations on assigned projects.</p>
9-13	<p>Developing and producing interactive projects</p> <p>Identifying and project development through the following stages of interactive media production (in chronological order): development of a project demo, adjustment of the project goals and outcomes, production, postproduction. Identifying the importance of self-directed approach.</p> <p>Continuous review of final assignment through various stages of completion</p> <p>Throughout the last 5 weeks of the semester the final assignment will be subject to review through its various stages of completion. This will be carried out in class presentations by students and will allow for a peer-review-based examination of the works in progress. In this highly interactive process you will learn through and from the work of your peers and the advice offered by the lecturer. These reviews will take all previously learned concepts into account and test the students in terms of their understanding of applying these to practice.</p>	1, 2, 3, 4, 5	<p>Lectures on:</p> <ul style="list-style-type: none"> - Variability, transcoding, automatization - Computational Aesthetics <p>In-class exercise Swap your projects</p> <p>Continuous review Final assignment</p> <p>Assigned Projects</p> <p>Project 3 Final assignment: Complete interactive media project which demonstrates user to user, user - object, or object to object interaction. Based on original concept.</p> <p>Continuous assessment and feedback throughout production.</p> <p>This project can be executed with the use of any analog as well as digital media/tools.</p> <p>Student Presentations on final assignment with critique and feedback</p>