

## COURSE CONTENT

<b>Course Code</b>	DT2020
<b>Course Title</b>	Game Design I
<b>Pre-requisites</b>	NIL
<b>No of AUs</b>	3
<b>Contact Hours</b>	39 hours studio contact

### **Course Aims**

In this course you will be introduced to the foundations and principles of game design and apply these in practice with the design and creation of a simple digital game. You will explore how play theory inspires the design of games, imbuing games with a range of roles including training, education and entertainment. You will apply these principles to propose a game that addresses a well-defined purpose. The learning in this course contributes directly to further study in game design.

### **Intended Learning Outcomes (ILO)**

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

1. Describe how principles of play theory contributes to the design of games.
2. Demonstrate the use of play and game theory to propose a game structure.
3. Design and play-test a game that addresses a purpose.
4. Present and evaluate the effectiveness of a game design strategy.
5. Constructively discuss and critique principles of game design and strategies employed by peers.

### **Course Content**

#### **Games and gaming**

In this course you will begin with an overview of the fundamental principles of games and why we all like to play. You will explore how play theory is embedded in all aspects of life, and how society has an in-built desire to play. This will introduce you to such founding concepts as play theory, game theory, engagement, challenge, reward, serious gaming and gamification. These terms have direct significance to all forms of game design, and provide the base from which games are designed. You will have the opportunity to design and play two original game prototypes, that will take you through the full production process of game design, from concept to prototype.

#### **Testing and prototyping**

You will experience one of the most important areas of all game design – prototyping, testing, and design iteration. Games never work out as expected in the first iteration, and so you will design and enact a testing program, where results from tests are objectively collected, analysed, and including to improve the game.

#### **Teamwork**

Most class activities will be in teams, although you have the choice to create your final project

individually. Teamwork is a generally a successful approach for game creation. You will be provided with team management processes and techniques to ensure good team relationships.

### Assignments

This course has two assessable assignments. Assignment 1: Physical gaming. In this assignment you will apply “Rules of Play” to create a game that has a real-world enactment. This game will have a pre-determined purpose, and it will be the role of the game to solve that task. Concepts of challenge, risk and competitiveness will be experienced, as the game-maker, and players, work together to find ideal solutions. One example would be a game that allows the players to explore and become familiar with an unknown space. A real-world game has the advantage in that it can be created and played with minimal preparation, and so the attention can focus on game design and gameplay. Assignment 2: Social Need. This assignment focuses on using game play for a social good. This requires a well-defined need and purpose, and the design of a game that meets those needs, while also providing reward for the players. This introduces the concepts surrounding “serious” games, and the use of games for other purposes than only entertainment.

### Assessment (includes both continuous and summative assessment)

Component	ILO Tested	Programme LO	Weighting	Team/ Individual
<b>Continuous Assessment</b> Assignment 1: Physical Gaming	1,2,3,4	N.A	40	Individual
<b>Final Project:</b> Assignment 2: Gaming for Social Need.	1,2,3,4	N.A	40	Individual
<b>Continuous Assessment: Participation</b>	5	N.A	20	Individual
Total			100%	

### Reading and References

Aarseth, E. *A narrative theory of games*. Proceedings of the international conference on the foundations of digital Games. ACM, 2012.

Byrne, E. *Game level design*. Vol. 6. Boston: Charles River Media, 2005.

Crawford, C. *Chris Crawford on interactive storytelling*. New Riders. 2012

Davies, M *Designing Character-based Console Games*. London: Charles River Media 2008

Fullerton, T. *Game DesignWorkshop: A playcentric approach to creating innovative games*. London:Morgan Kaufmann 2008

McGonigal, J. *Reality is broken: Why games make us better and how they can change the world*. Penguin, 2011.

Moore, M. *Basics of Game Design*. CRC Press 2011

Oxland, K. *Gameplay and Design*. London: AddisonWesley. 2004

Perry, D *Game Design*. London: Cengage 2010

Salen, K. and Zimmerman, E. (2004) *Rules of Play*. MIT Press: London

Schell, J. *The Art of Games Design: A book of lenses*. London: Morgan Kaufmann Publishers 2008

## 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	<b>Introduction to course</b>  <b>First play exercises</b>	1,2	<b>Introductory Lecture</b>  - Overview of games history

			<ul style="list-style-type: none"> <li>- Overview of game theory</li> <li>- Play Theory</li> </ul> <p><b>In-class discussion</b> on personal favourites in gaming</p> <p>Class Play theory exercise</p>
2	<p><b>Lecture on History and Society</b></p> <p><b>Assignment 1</b></p>	1,2	<p><b>Lecture on Game History</b></p> <ul style="list-style-type: none"> <li>- Relevance</li> <li>- Social relationship</li> <li>- Benefits</li> <li>- Technology</li> <li>- Implications</li> </ul> <p><b>Back to Play Theory</b></p> <p><b>Introduction to Assignment 1:</b></p> <p><b>Physical Gaming</b></p> <ul style="list-style-type: none"> <li>- Discuss topic</li> <li>- Form teams</li> </ul>
3	<p><b>Lecture of Play Theory in Action</b></p> <p><b>Assignment 1 – Design concepts</b></p>	1,2,3,4	<p><b>Lectures</b></p> <ul style="list-style-type: none"> <li>- Play Theory in Action</li> <li>- Team Management</li> <li>- Prototypes and Testing</li> </ul> <p><b>Assignment 1. Concept Design</b></p>
4-5	<p><b>Lectures</b></p> <p><b>Assignment 1 – Prototyping and Testing</b></p>	1,2,3,4	<p><b>Lectures on:</b></p> <p>Defining a game - designing a purpose</p> <p>Overview production pipeline</p> <p>Game testing and iterative design</p> <p><b>Assignment 1. Concept testing</b></p>
6	<p><b>Student gameplay presentations</b></p>	4,5	<p><b>Play-Day. Game play of student games.</b></p> <p><b>Assignment handin</b></p>
7	<p><b>Lectures</b></p> <p><b>Assignment 1 – Overview</b></p>	1,2,4	<p><b>Lecture on Serious Gaming</b></p> <ul style="list-style-type: none"> <li>- Gaming for social need</li> <li>- Information</li> <li>- Education</li> <li>- Gamification</li> </ul> <p><b>Assignment 2: Introduction</b></p> <ul style="list-style-type: none"> <li>- Preparation</li> </ul>
8	<p><b>Lectures</b></p> <p><b>Assignment 2 – Definition</b></p>	1,2,3,4	<p><b>Lecture: Assignment specific</b></p> <ul style="list-style-type: none"> <li>- Defining requirements</li> <li>- Establishing gameplay</li> <li>- Use of software</li> </ul>
9	<p><b>Assignment 2 – Skills</b></p>	1,2,3,4	<p><b>Software Specific</b></p> <ul style="list-style-type: none"> <li>- Using software</li> <li>- Using library assets</li> </ul>

			- Focusing on gameplay
10-12	<b>Assignment 2 – Production</b>	1,2,3,4	<b>Game production</b>
13	<b>Presentations</b>	4,5	<b>Student presentations and handin</b>