# COURSE CONTENT

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| **Course Code** | DT3000 |
| **Course Title** | Advanced Drawn Animation |
| **Pre-requisites** | DT2000 |
| **No of AUs** | 3 |
| **Contact Hours** | 39 Contact Hours |

**Course Aims**

This course will introduce you to sophisticated techniques of 2D animation and builds upon learning in DT2000. You will learn how to the use 2D animation software and the entirety of the 2D production process will be covered. Through a series of hand drawn exercises, you will gain a practice-based experience of advanced animation techniques. This course is designed to further your skills in this medium and prepare you to create your own animated film.

**Intended Learning Outcomes (ILO)**

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

1. Describe the complex elements of motion as applied to character animation in 2D.
2. Apply your knowledge of advanced principles of animation to a range of challenges that demonstrate complex scene and character interaction.
3. Develop a complex scenario that demonstrates proficient camera technique and effects in 2D animation.
4. Create accomplished animations that reflect mood, attitude, weight, timing and composition effectively.
5. Critique your own work and your peers' work in a clear and constructive manner.

**Course Content**

- **2D animation pipeline.**
  Overview of key concepts and theories around the creation of motion through drawing Using characters of your own choosing you will create animations that will focus on different aspect of such principles. Introduction to different digital and analogically solutions for the creation of 2D films
- **How to create animation set up.**
  An exploration of character and environment to show your understanding of staging, weight, and composition and how you can create a convincing scene demonstrating how a character interacts with the environment and how through the use of proper camera placement you can create a complex cinematic scenario.
- **Developing proficiency with pose weight and attitude in relation to complex human locomotion and acting.**
  Building on your existing skillset, you will explore key issues and concepts of complex motion. Through the use of a live action and animation examples you will apply advanced concepts in the creation of character motion in a range of perspective settings and interactions with the environment and other characters.
- **Transfer the knowledge acquired to your own personal work.**
  Through a series of exercises and in-class projects, you will explore a range of advanced animation problems pertaining to creating original movement. Developed through lectures, workshops, peer and instructor feedback, you will apply advanced principles and problem solving approaches to a series of scenarios that deal with movement, weight,

staging, and timing.

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

| Component | Course LO Tested | Related Programme LO | Weighting | Team/Individual |
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| Continuous Assessment 1 Assignments: Based on class activities | 1,2,3,4 | | 30% | Individual |
| Continuous Assessment 2 Participation | 5 | | 20% | Individual |
| Final Project: Design and present in a portfolio form the work achieved over the 13 weeks | 2,3,4 | | 50% | Individual |
| Total | | | 100% | |

**Recommended Reading and References**


1. Thomas, Frank, Ollie Johnston, and Walton Rawls. *Disney animation: The illusion of life*. Vol. 4. New York: Abbeville Press, 1981.
2. Goldberg, Eric. *Character Animation Crash Course!* Silman-James Press, 2008.
3. Ghertner, Ed. *Layout and composition for animation*. Taylor & Francis, 2010.
4. Gilland, Joseph. *Elemental magic: the art of special effects animation*. Vol. 1. Taylor & Francis, 2009.


**Course Policies and Student Responsibilities**

**(1) General**

You are expected to complete all assigned 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 in to the attendance register.

**(3) Absenteeism**

In-class activities and participation 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, and 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***

***Subjected to adjustment by instructor according to students' progress, public holidays and unforeseeable circumstances.

| Week | Topic | Course LO | Readings/ Activities |
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| 1 - 2 | • **Advanced animation practices.** Overview of key concepts and theories around animation and how we create our own animation. Creating your own animation in an analogue or digital environment using a proper toolset and pipeline | 1,2,5 | **Introductory Lecture** **In-class exercise:** introduction to course objective and goals **Lecture** on sophisticated use of key frames, spacing, squash and stretch, slow in/slow out, arcs, anticipation etc. Recap on human locomotion and different human gates introduction to the digital pipeline **In-class exercise:** a character transitioning from different gates |
| 3 - 7 | • **Understanding the figure motion in relation to the environment** An exploration of animating the figure examining poses attitude, weight, anatomy and composition and how this constitutes the basis of the creative process for animation. Analysis of complex layout setup and how to create depth in a 2D context | 1,2,3,5 | **Lecture:** animation layout how to create camera movement in 2D and the use of different level to achieve depth analysis of relevant example of good storytelling through complex and compelling camera work **In-class exercises:** creating of a series of scenes that demonstrate the understanding of character immersion in an environment Lecture: on Effect animation: - Follow through, overlapping and wave action, design as applies to visual effect elements in 2D animation In-class exercise: create a simple |

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| | | | animation requires special effect |
| 8- 13 | • **Exploring and designing your own animation** Overview of key issues and concepts in relation to creating design composition and characters for animation based of life observation, with many examples.<br><br>• **Building a show reel of your own animation** Creating a reel of your own animations. Developed through peer/instructor feedback sessions in the course of the semester | 2, 3,4,5 | **Lecture** Sophisticated use of wave actions<br>- Weight:<br>- The importance of weight for believable animation<br>- advanced approaches to timing and sophisticated use of animation fundamentals<br>The commonality of animation principles through all areas of animation practice:<br>**In-class exercise**<br>Creating a character interaction using facial and body motion<br>**Lecture** Introduction to character acting and the human speech<br>**Final Projects**<br>Assemble and design a complex animation demonstrating a character interacting with the environment and with other characters<br>**Project Critique** lab class where students will receive personalized feedback as they work on their assignments<br>**Student Presentations** on final show reel |