# COURSE CONTENT

| Course Code | DD3016 |
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| Course Title | History of Design |
| Pre-requisites | NIL |
| No of AUs | 3 |
| Contact Hours | 39 total contact hours (2 hours lecture and 1 hour seminar weekly) |

**Course Aims**

This introductory course covers key movements and events in the evolution of Interaction Design, Product Design and Visual Communication. In Interaction Design, you will survey the work and ideas of artists and designers who have explored interactive media, as well as the scientists, engineers and mathematicians who have developed information technologies. You will study the histories of certain technologies which have come to define the medium of personal computer and human-computer interaction. For Product Design, you will explore how design trends and movements are formed in the contexts of history, emphasizing human relationships between designed objects, visual imageries, art & design movements, science, technology, culture and society. In Visual Communication, you will gain a historical awareness of graphic design and its relationship to technology and industry practice. You will analyse design and designers from various eras through practice and theoretical research projects. This course will equip you with a solid foundation in design history and theory, and inform further study in contemporary design practice.

**Intended Learning Outcomes (ILO)**

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

1. Identify and discuss key characteristics of influential design, architectural or art movements that have defined the history of design.
2. Describe key influences that have impacted on the development of design, be they social, cultural, anthropological, political, philosophical, scientific or technological.
3. Describe contexts, principles and concepts that are unique to design and the design process.
4. Present, discuss and evaluate key ideas and theories applied in design principles.
5. Contribute to the learning environment by participating positively to class discussion, critiques and activities relating to the history of design.

**Course Content**

**Course Introduction and overview**

At the introduction to this course you will be introduced to an overview of how Interaction, Product, and Visual Communication each contribute to the history of design.

You will then attend three sections where you will study each of these areas in 4-week blocks.

**Interaction Design**
In History of Interaction in Design you will explore the key principles of interaction. Firstly, the reciprocal exchange between the viewer and the artwork with the ability to manipulate media and

objects intuitively. Secondly, The non-sequential linking of information, events, and discrete media. And thirdly, the experience of entering a multi-sensory representation of three-dimensional space. These three themes will be referred to as Interactivity, Hypermedia, and Immersion.

- **Interactivity**: This topic explores the evolution of the graphical user interface and the technical, aesthetic, and cognitive concepts behind human-computer interactions, and their influence on the art, design and application of interactive media.

- **Hypermedia**: A discussion of the evolution of hypermedia and the non-linear association of information resulting in the changing spatial and temporal boundaries in interactive media design.

- **Immersion**: An exploration of the evolution of virtual reality and 3D virtual space: multimedia as an immersive experience that engages multiple senses.

**Product Design**

In History of Product Design you will explore how objects and the built environment are produced in response to changes in thinking and ideas. These ideas evolve according to human values, contexts and conditions. Rationales and qualities of objects change, with new relationships being formed with individuals, societies and ecology, over the flow of the significant timelines:

- The Industrial revolution
- Design Reform Movements in Europe and America
- Modernism & Post Modernism across the Atlantic
- The Conceptual in Art & Design
- Discursive & Immaterial Frontiers

**Visual Communication**

In Visual Communication you will focus chiefly on the history and development of graphic design. This course facilitates you in locating, critically evaluating and presenting a variety of historical information from a variety of sources. Through an active learning strategy this course intends to engage you with design's vast visual library and its social, political and technological contexts in order to underpin creative practice. Contemporary designers take inspiration from many sources and exploring graphic design's past is one proven method of expanding visual vocabulary. The course will provide a concise overview of Graphic Design history focusing on the following periods:

- The Visual Word
- The Industrial Revolution
- The Modernist Era
- The Age of Information

**Student Presentations**

At the end of the semester after studying, Interaction, Product, and Visual Communication, you will deliver a 5-10 minute individual presentation supported by a handout.

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

| Component | ILO Tested | Programme LO | Weighting | Team/ Individual |
|---|---|---|---|---|
| **Interaction Design** Written and/ or visual response | 1,2,3,4 | N.A | 20% | Individual |
| **Participation** | 5 | | 10% | Individual |
| **Product Design** Written response | 1,2,3,4 | N.A | 20% | Individual |
| **Participation** | 5 | | 10% | Individual |
| **Visual Communication** Written and/ or visual response | 1,2,3,4 | N.A | 20% | Individual |
| **Participation** | 5 | | 10% | Individual |
| **Final Presentation** | 1,2,3,4 | N.A | 10% | Individual |
| Total | | | 100% | |

**Reading and References**

1. Bhaskaran, Lakshmi. *Design of the Times,* Rotovision, 2005
2. Bierut, Michael. Looking Closer. Allworth, 1997.
3. Bush, Vannevar. "As we may think" (1945) in Multimedia: From Wagner to virtual reality, 2002.
4. Designsingapore *Council Ministry of Communications and Information,* 2016.
5. Fiell, Charlotte & Peter. *Design of the 20th Century,* Taschen, 2005
6. Feill, Charlotte & Peter. *Scandinavian Design,* Taschen, 2013
7. Fisher, Scott. "Virtual Interface Environments" (1989) in Multimedia: From Wagner to Virtual Reality, 2002.
8. Hauffe, Thomas. *Design A Concise History,* Lawrence King Publishing, 1998
9. Hollis, Richard. *Swiss Graphic Design*. Laurence King Publishing Ltd, 2006.
10. Kay, A. C., and Adele Goldberg. "Personal dynamic media" (1977) in Multimedia: From Wagner to virtual reality, 2002
11. Kries, Mateo, and Jolanthe Kugler. *The Bauhaus: #Itsalldesign.* Vitra Design Museum, 2015.
12. Meggs, Philip B. *History of Graphic Design.* Wiley, 2016
13. Raizman, David. *History of Modern Design,* US: Lawrence King Publishing, 2003
14. Sutherland, Ivan E. "The ultimate display" (1965) in Multimedia: From Wagner to virtual reality, 2002.
15. Weiner, Norbert. "Cybernetics in history" (1954) in Multimedia: From Wagner to virtual reality, 2002.

**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.

| Introduction | | | |
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| **Week** | **Topic** | **Course LO** | **Readings/ Activities** |
| 1 | **Course Introduction and overview** | 1,2,3 | **Lecture** Overview of course structure. All faculty teaching for the interaction design, product design and visual |

| | | | communication history modules to introduce specific histories. |
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**Interaction Design (4 weeks)**

| Week | Topic | Course LO | Readings/ Activities |
|---|---|---|---|
| 2 | **Interaction Design Lecture 1 Interactivity**: The evolution of the technical, aesthetic, and cognitive concepts behind human-computer interactions, and their influence on the art, design and application of interactive media. Beginning with the fundamentals of cybernetics as conceived by engineer Norbert Wiener in the late 1940s, we will discuss subsequent scientific breakthroughs in human-computer interaction. | 1,2,3,4,5 | **Lecture** on Interactivity **Student Research Assignment** Students will be assigned to groups for research in weeks 2-4. |
| 3 | **Interaction Design Lecture 2 Hypermedia** We begin with Vannevar Bush's seminal investigation into the concept of the hyperlink through his design of the Memex in 1945, the prototypical multimedia workstation. This will be followed by Alan Kay's creation of the graphical user interface and the first hypermedia system for a personal computer at Xerox PARC in California in the 1970s. | 1,2,3,4,5 | **Lecture** on Hypermedia **Student Research Assignment** Students will conduct independent research and analyze the history of hypermedia in the context of readings and assigned design and art projects. Assignments will be given in OSS. **Research** Students will conduct directed independent and group research followed by discussion. |
| 4 | **Interaction Design Lecture 3 Immersion**: We will overview the research of pioneering VR artists, designers and scientists dating back to the 1950s, including Ivan Sutherland and Scott Fisher, who pioneered the tools and aesthetics of virtual reality, stereoscopic imaging, and telepresence, leading to the creation of digital, immersive environments. | 1,2,3,4,5 | **Lecture** on Immersion **Student Research Critique Assignment** Students will conduct independent research and analyze the history of virtual reality in the context of readings and assigned design and art projects. Assignments will be given in OSS. **Research** Students will conduct directed independent and group research followed by discussion. |

| 5 | **Interaction Design Lecture 4**<br>Summary and review of Interaction Design based on the previous three weeks. | 1,2,3,4,5 | **Summary Lecture**<br>**Final Research Project**<br><br>**Research**<br>Students will conduct directed independent and group research followed by discussion. |

| PRODUCT DESIGN (4 weeks) | | | |
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| **Week** | **Topic** | **Course LO** | **Readings/ Activities** |
|---|---|---|---|
| 6 | **Product Design Lecture 1**<br>**Historicism & Industrial**<br>     **Revolution**<br>**& Design Reform Movements**<br>• Historical Styles<br><br>• Technological Innovations & the Industry<br><br>• Design Reform Movements | 1,2,3,4,5 | **Lecture** on Design Reform Movements<br><br>**Student Research Critique Assignment**<br>Students will be assigned to groups for research in weeks 2-4.<br>Assignments will be given in OSS. |
| 7 | **Product Design Lecture 2**<br>**Bauhaus & Modernism**<br>• DeStijl & Constructivism<br><br>• Zeitgeist: Futurism, Cubism & Dada<br><br>• Organic Modernism, Machine Age in America | 1,2,3,4,5 | **Lecture** on Modern Movement<br><br>**Research**<br>Students will conduct directed independent and group research followed by discussion. |
| 8 | **Product Design Lecture 3**<br>**Memphis, Postmodernism,**<br>**Deconstructivism**<br>• Pop Art & Design,<br><br>• Memphis, Alessi<br><br>• Hi-Tech, Techno Art & Design | 1,2,3,4,5 | **Lecture** on Disrupting Modernist Rationalism<br><br>**Research**<br>Students will conduct directed independent and group research followed by discussion. |
| 9 | **Product Design Lecture 4**<br>**Conceptual Art & Design,**<br>**Minimalism**<br>• Japanese Aesthetics, DeStijl, "Less is More"<br><br>• Marcel Duchamp, | 1,2,3,4,5 | **Lecture** on Dematerialisation & Phenomenology<br><br>**Research**<br>Students will conduct directed independent and group research followed by discussion. |

| | Rhetorical Design, Droog <br> • Supernormal, Anti-Objects, Phenomenology | | |
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**VISUAL COMMUNICATION (4 weeks)**

| Week | Topic | Course LO | Readings/ Activities |
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| 10 | **Visual Communication Lecture 1** <br> **Introduction** <br> Overview of the key areas of graphic design that this course will cover. Discussing why graphic design history is important to contemporary designers. <br><br> **Prologue** <br> A historical overview of the visual word. | 1,2,3,4,5 | **Lecture** on the visual word <br> **Student Research Assignment** <br> Students will be assigned to groups for research assigned in weeks 2-4. |
| 11 | **Visual Communication Lecture 2** <br> **Industrial revolution** <br> A concise historical overview of various art movements of the industrial revolution | 1,2,3,4,5 | **Lecture** on The Industrial revolution <br> **Presentation** <br> Students will deliver brief presentations on their research critique followed by discussion. <br> **Student Research** <br> Students will conduct Directed independent research and analyze the history of art movements during the industrial revolution in the context of readings and assigned design and art projects. |
| 12 | **Visual Communication Lecture 3** <br> **Modernist Era** <br> Providing a concise historical overview of various art movements of the modernist era. | 1,2,3,4,5 | **Lecture** on The Modernist Era <br> **Presentation** <br> Students will deliver brief presentations on their research critique followed by discussion. <br> **Student Research** <br> **Critique Assignment** <br> Students will conduct directed independent research and analyze the history of the modernist era in the context of readings and assigned design and art projects. |

| 13 | Visual Communication Lecture 4 **Age of Information** Providing a concise historical overview of various art movements of the age of information to present day. **Critique Assignment** Students will conduct independent research and analyze the history of the age of information in the context of readings and assigned design and art projects. | 1,2,3,4,5 | **Lecture on The Age of Information** **Research** Students will conduct directed independent and group research followed by discussion. |