

COURSE CONTENT

Course Code	DR3007
Course Title	Studies in Form
Pre-requisites	DR2005 Computer-Aided Design I
No of AUs	3
Contact Hours	39 hours studio contact

Course Aims

This intermediate level course introduces you to the concepts of schema and empirical methodologies in visualization, exploration and development of visual form. It is integrated as a practice-based learning experience that develops your imaginative and formative ability to allow you to create forms based on the application of learnt aspects of the visual language. You are expected to generate object form utilizing their 3D digital skillset and production tools. The design process will develop and hone your understanding of the visual impact of form as a result of transformation and manipulation.

Intended Learning Outcomes (ILO)

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

1. Identify and discuss various aspects of abstract and symbolic form and its generative origins from schema and empirical methodologies.
2. Generate, develop and refine object form from inception to execution through various physical and/or digital media.
3. Apply product/ industrial design, interaction design and 3-dimensional modelling and digital production methods to realize assigned projects based on various themes.
4. Present your design process and object forms in a clear and cohesive manner through visual presentations and virtual/physical objects.
5. Constructively discuss and critique various facets of design process and design methods and presentation techniques employed in your own work and the work of your peers.

Course Content

This course introduces you to the development of forms through the understanding of the visual language involving schemas, observations, metaphors, intention and meaning. Through lectures and projects, you will explore the process in developing visual form while learning techniques to facilitate the conceptualization and production of their projects. You will develop projects through deductive and observed starting points, follow the process through the digital medium to its delivery using the facilities of the rapid-prototyping workshop and 3D printing technologies.

Assessment (includes both continuous and summative assessment)

Component	ILO Tested	Programme LO	Weighting	Team/ Individual
Design Process:	1,2,3,4	N.A.	20	Individual
Design Projects:	1,2,3,4	N.A.	60	Individual
Continuous Assessment: Participation	5	N.A.	20	Individual

Total	100%	
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Reading and References

1. Blanciak, Francois. **Siteless: 1001 Building Forms**. The MIT Press, 2008
2. Thompson, D'Arcy W. **On Growth and Form**. Dover Publications, 1992
3. Godwin, Joycelyn & Kircher, Athnasius. **A Renaissance Man and the Quest for Lost Knowledge**. Thames and Hudson, 1979
4. Focillon, Henri. **The Life of Forms in Art**. Zone Books, 1989.

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	<p>Introduction Overview of course</p> <p>Design Process Apriori Form definition and generation</p>	1, 2, 3	<p>Lecture: Introduction to course Apriori Form primer</p> <p>Design Project Brief, case studies and discussion</p>
2-4	<p>Design Process Schemas and Deductive Form</p>	1,2,3, 4	<p>Design Project Ideation: Schema and Deductive form generation based on text/triggers</p>
5-7	<p>Project Development</p> <p>Design Refinement Model Making Workshop Demonstrations</p>	1, 2, 3, 4, 5	<p>Design Refinement Form development, materials & production considerations</p> <p>Model Making Discussion and practice on various object/ model making materials and techniques in studio/ workshop, including workshop and equipment demonstrations.</p> <p>Continuous assessment and feedback throughout production.</p>
8-9	<p>Design Process Empirical Form</p>	1, 2, 3, 4	<p>Lecture: Empirical Form primer</p> <p>Design Project Brief, case studies and discussion Ideation: Empirical form generation based on observed phenomenon and manipulation</p>
10-12	<p>Project Development</p> <p>Design Refinement Model Making Workshop Demonstrations</p>	1, 2, 3, 4, 5	<p>Design Refinement Form development, materials & production considerations</p> <p>Model Making Discussion and practice on various object/ model making materials and techniques in studio/ workshop, including workshop and equipment demonstrations.</p> <p>Continuous assessment and feedback throughout production.</p>

13	Design Project: Final Presentation Final verbal/ visual presentation of design project Physical objects/ models	1, 2, 3, 4, 5	Student Presentations on Design Project with critique and feedback
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