ARCHDES 300 | DESIGN 5 | TOPIC OUTLINE | SEM 1 2019

Design 5 presents an introduction to complex architectural thinking. It examines both conceptual and exceptional spaces and develops an understanding of corresponding architectural methodologies and systems. Topics will explore the cutting edge of architecture, with an individual emphasis on the theoretical, contextual, architectonic, communicative, material, spatial, sociological or topographical.

EMMA MORRIS with OML / DRH

I am a graduate of the University of Auckland and University College London Bartlett. I have worked in architecture in New York and London and currently run my own practice in Auckland.

Processing

Archive of Atmosphere: an installation at A+W/NZ exhibition

GENERAL COURSE INFORMATION

Course :	Design 5 ARCHDES300
Points Value:	30 points
Course Director:	Sarosh Mulla: s.mulla@auckland.ac.nz
Course Co-ordinator:	Uwe Rieger: u.rieger@auckland.ac.nz
Studio Teacher:	Emma Morris
Contact:	office@emmamorris.studio
Location:	TBC
Hours:	Monday and Thursday 1:00-5:00pm

For all further general course information see the ARCHDES300 COURSE OUTLINE in the FILES folder on CANVAS.

Processing: Machines for Remembering

The Processing studio is a space to explore design through a parametric drawing and model making process. The use of parametric tools allows for the design process of 'optioneering', to be accelerated and expanded. By creating a wide array of design options the intent of the studio is that students develop a deeper understanding of their instincts as designers.

This year's Processing studio 'Machine-for-remembering' will investigate the design process as a storytelling device. The title references Borges description of a Machine for Thinking, a renaissance mnemonic system. What are todays' systems which assist in remembering, and storing memories? How can our 'machines for thinking' be part of a design process, and how can our projects be part of a larger mnemonic system?

The archive is a shuttle between past present and future. Through understanding the past and considering what is valuable for the future, the architect can also use archival practice to speculate on future scenarios of the built environment.

Method:

1. *Archival practice: Students to visit archives and collections. Source stories, memories, artefacts, to uncover hidden worlds, to give*

presence to the invisible. Look for connections between places, stories, objects, materials. Identify and nurture individual interests.

2. *Analysis of your findings: using analogue tools of sketching and model making, analyse and reinterpret your findings.*

3. *Analogue models: you can work in groups to make a series of models to represent observations over time.*

4. *Proposition 1: a single space to display or protect. A cabinet, a screen, or a pavilion.*

5. *Digital models: The intention is to make a collection of architectural components, using a software of students choice, for example Rhino (with Grasshopper) or Maya. Students are expected to up-skill independently using online tutorials, with the support of OML / DRH.*

6. *This series of analogue and digital models will gradually encode your story, and create a design logic for your project. Keep pushing your models to discover variations and extremities, and record your process by taking many iterative screenshots.*

7. *Site analysis: Analyse site by collecting information, stories, artefacts as an archaeologist or a forensic scientist might. Understand the principles of mana whenua, micro ecology, climate, circulation, site data. Layer as much data as you can over the site plan.*

8. *Proposition 2: Two spaces: a main space and an auxiliary space in the landscape.*

Mid semester presentations

9. *Evolution: During the second half of the semester we start from the big picture, and using the architectural library developed so far, identify the main drivers in your project.*

10. *Cohesion: An efficient programme and how this drives or navigates form and structure. Performance: the interaction between participants, environment and the architecture.*

11. *Suspension of belief: Integration of structure and materiality.*

12. *Proposition: the project can resolve in a building or an architectural proposition. An architectural proposition is spatial, habitable, transformative, an 'event'. The proposition is to represent and communicate your story, bringing together your design logic, the context, brief, programme, aesthetics, structure, and materiality.*

Questioning: Note the unexpected, were there any discoveries along the way? Critique the method: what are your reflections on the design process? What possibilities have been revealed, what further questions were unearthed?

TOPIC STRUCTURE AND CONTENT

SPECIAL NOTE:

Week	Date	Event	
Week 1	Mon 4.3 Thu 7.3	12:00 All architecture meeting, rm 311 2:15 Design 5 staff presentations and studio ballot Design 5 Studio classes commence	
Week 2	Mon 11.3 Thu 14.3	Sourcing & Collecting Sketching.	Look out for OML Digital workshops
Week 3	Mon 18.3 Thu 21.3	Analogue models Proposition 1 Presentation	
Week 4	Mon 25.3 Thu 28.3	Scripting & Context	
Week 5	Mon 1.4 Thu 4.4	Scripting & Context	
Week 6	Mon 8.4 Thu 11.4	Indexing Design 5 Mid-semester presentation: Proposition two	
		MID-SEMESTER BREAK	
Week 7	Tue 29.4 Thu 2.5	Big picture context, identify drivers	
Week 8	Mon 6.5 Thu 9.5	Programme, complex space	
Week 9	Mon 13.5 Thu 16.5	Resolution. Structure, materials, façade articulation.	
Week 10	Mon 20.5 Thu 23.5	Draft printouts storyboard. Print final models	
Week 11	Mon 27.5	Render / presentations	

	Thu 30.5	
Week 12	Mon 3.6	Render / presentations
	Thu 6.6	Design 5 Final Studio Reviews

RESOURCES

Bibliography, online tutorials and websites will be emailed.

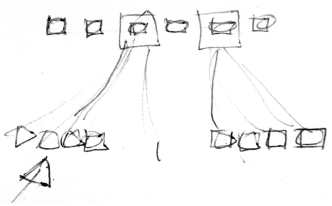
REQUIRED PRODUCTION

As students will be engaging with as yet unknown technologies in their future professional lives, this studio encourages students to take the initiative to teach themselves software, and to learn from each other in the studio, fostering adaptability and self-reliance.

Past student work: http://msemmamorris.blogspot.co.nz.

Students are expected to attend the beginning of every session, and sign up for discussion every week. It is not a prerequisite of this studio to know any software. However, once started, self-guided rapid up-skilling of software skills is expected.

Production:
Evidence of iterative modelling both physical and digital.
Visualise data in three dimensions and over time. Animations optional.
Interpret studies into 3D spaces using software.
Evidence that student has pushed the design through multiple iterations.
Proficiency: demonstration of control over selected design tools.
Present a resolved architectural proposition.
Collect design iterations in an A3 book format.



Iteration diagram. Select two iterations from your matrix. Use these two to make further iterations. Work without a preconceived idea of the finished outcome.

ASSESSMENT & FEEDBACK

This course is assessed as 100% coursework. Conversational feedback is given throughout the semester. Written feedback, with indicative grading, is given at a date around the mid-point of the semester. All further information regarding assessment is available in the ARCHDES 300 Design 5 Course Outline (on Canvas).

LEARNING OUTCOMES

General Course Outcomes: On successful completion of this course students should be able to:

- Theory: Show evidence of engagement with selected / prescribed areas of architectural theory and knowledge. Further, to show evidence of the exploration of the possible influence of this upon the development of architectural propositions.
- Architectonics: Demonstrate abilities to project, explore and develop the tectonic characteristics of the project through the creative engagement with material, structural or constructional propositions.
- Programme: Show evidence of engagement with identified cultural, social and functional positions as they might inform speculative architectural propositions.
- Performance: Show abilities to advance conceptual thinking through engagement with environmental and contextual conditions that could bear upon the project, and to examine the way in which the architecture may affect those same conditions in return.
- Form and space: Demonstrate abilities to develop speculative three dimensional architectural form and space.
- Media: Display skill in the communication and development of design propositions through the considered use of architectural media.

Specific Topic Outcomes: This studio topic will engage the general course outcomes in the following ways:

- *Theory: Using the provided reading list, find an aspect of computational theory of interest, and communicate this idea through your design development.*
- *Architectonics: Demonstrate how the structure and materials selected are integrated with building form or construction techniques, and investigate the parameters of the material.*
- *Programme: Use your design research to develop your specific program and demonstrate integration with form and structure. Consider the participants, and efficiency of movement.*
- *Performance: Demonstrate environmental performance and ecological connectivity between the internal and external conditions of your building. ie how has the internal performance of the space been influenced by the conditions which surround it. Show an articulation or variation of skin and façade. Where appropriate, find levels of optimization and efficiency using software.*
- *Form and space: Demonstrate the use of modeling (physical and digital) to discover interesting architectural moments, both internal and external, and resolve your work into a convincing and coherent building solution.*
- *Media: Locate a relevant architectural precedent, find the architectural drawings and analyse the drawings. Demonstrate thinking through drawing (scripting is a drawing tool) and making. What are the limitations and what are the strengths you find in the design software? Demonstrate a variety of media. Edit your work to present the strongest moments, utilizing clear communicative techniques.*