ARCHDES 301 | DESIGN 6| TOPIC OUTLINE | SEM 2 2019

Design 6 **The Integrated**: The culmination of all aspects - conceptual, formal, material, tectonic, **environmental,** structural - of architectural design within the context of a larger network of infrastructural services. Also requires an understanding of the full range of drawings describing the workings of the building as both an active 'machine' and place for human comfort.

The culminating design course of the Bachelor of Architectural Studies in which students are expected to demonstrate appropriate knowledge and skill in the preparation of a resolved design proposal, in response to a challenging project topic. Design proposals are required to address issues of theory, architectonics (material, structures, construction), programme (cultural, social, functional), performance (contextual, environmental) and the formative influences of these factors on space and form through the skilful, considered use of architectural media.

ALESSANDRO PREMIER

Alessandro is an Italian-registered architect and PhD in Architectural Technology. Senior lecturer at the University of Auckland, he's interested in the architectural integration of materials and technologies to improve the environmental quality of man-made spaces.

ADAPTABLE HOUSINGS

Maurizio Sacripanti, competition project for the Peugeot Skyscraper in Buenos Aires (1961) - http://socks-studio.com/2013/11/15/peugeot-skyscraper-in-buenos-aires-a-project-by-maurizio-sacripanti-1961/

GENERAL COURSE INFORMATION

Course :	Design 6 ARCHDES301
Points Value:	30 points
Course Director:	Andrew Douglas andrew.douglas@auckland.ac.nz
Course Co-ordinator:	Alessandro Premier alessandro.premier@auckland.ac.nz
Studio Teacher:	Alessandro Premier
Contact:	alessandro.premier@auckland.ac.nz
Location:	TBC
Hours:	Monday and Thursday 1:00-5:00pm

For all further general course information see the ARCHDES301 COURSE OUTLINE in the FILES folder on CANVAS.

ADAPTABLE HOUSINGS

omnia mutantur "Everything changes"
(Ovid, Metamorphoses, book XV)

According to the idea of liquid society (Bauman, 2000), our social life is characterized by unpredictable changes: in the job, in the emotional relationships, and so on. International mobile students, mobile workers, temporary employees, skilled migrants are only some examples of this phenomenon. As the values, cultures, and systems of society change, so do the self-identities of individuals.

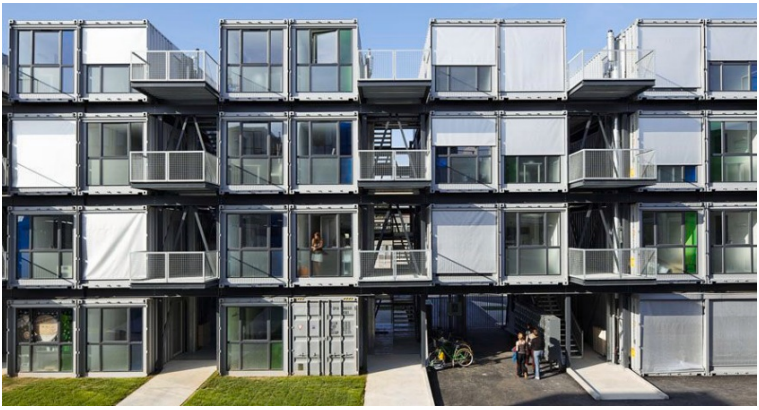
In recent years, architectural design seems to look for different answers to this uncertainty - typical of the Western World - designing buildings that are able to adapt to different situations: changes of usage, changes of policies, changes of lifestyles, technological change, climate change. This ability to change, adapting itself to different circumstances is an interpretation of sustainability through the extension of the number of cycles of use that a building can offer (Smith and Austin 2016).

The adaptability is achieved through a set of design strategies/approaches towards change over time. The building could be

adjustable, versatile, convertible, scalable, retrofittable, expandable. An effective design proposal does not necessarily have all these features, but only those that are necessary. Examples can be found in the work of Shigeru Ban, SANAA, MVRDV.

*The goal of this Topic is to experiment an adaptable architecture through the **design of a student housing**. Students will experiment the ability to read space as an active void, available for transformation. Flexible interior spaces, adaptive skins, modularity, plug-in building are only some of the strategies that can be used. Beyond all these aspects, students must consider the relationships with the surrounding environment: daylight, orientation, colour, sight and visual relationships. Students will investigate how the building interacts with the environment and how this can affect dwelling. The final goal is to exploit the relationships between the three components: architecture-environment-user.*

***The investigation will involve the complete re-design of the current Huia Residence site** in 110 Grafton Rd, Auckland, which is currently under development with new retail spaces and a medical suite.*



***Cattani Architects, Cité A Docks, Le Havre, 2010 -** https://www.archdaily.mx/mx/02-55887/cite-a-docks-cattani-architects*

Students will develop their projects through a precise sequence of stages, summarized in observation, experimentation and proposition. These stages can be outlined as follows:

WEEK 1: Introduction to the topic, to the site, to the tasks.

WEEK 2: observation. The students, in groups, will study the features and constraints of the site. The results will be collected in a presentation and discussed together. Each student will choose a work of modern or contemporary architecture considered exemplary for its response to adaptation. Some precedents will be introduced by the tutor. The building will be studied and re-designed to fully understand it.

WEEK 3: experimentation. Students will have to build a massing model of a building pursuing different interpretations of an adaptable architecture and a model of a single unit with the same purposes. The goal is to bring together different creativities and share experiences. The models will be discussed among the students, evaluating their qualities but also the real possibilities of construction.

WEEKS 4-5: proposition. Each student will develop: the functional programme of the site and of the building according to the one provided by the tutor; the circulation diagram based on the discussed typologies; a structural diagram; a concept for the building envelope. The findings will be discussed in group and one to one meetings.

WEEK 6: feedback. The previous materials to be collected in drawings/models. Students to receive feedback (mid-semester crit)

WEEK 7: proposition. Students will develop the design of 2 sections of the whole building and, at least, 2 floor plans according to the identified programme. Mid-semester feedback will be discussed.

WEEK 8: feedback. The previous materials to be collected in drawings. Students to receive feedback (cross crits).

WEEKS 9-10-11: project finalization, one to one meetings.

Habiter Autrement + Ateliers Jean Nouvel, Cenon, 2013 - https://www.archdaily.com/397254/cenon-habiter-autrement-ateliers-jean-nouvel

TOPIC STRUCTURE AND CONTENT

Students will be required to hand their work on time as described in the schedule below

Week	Date	Event
Week 1	Mon 22.7 Thu 25.7	12:00 All architecture meeting, rm 311 2:15 Design 6 staff presentations and studio ballot Design 6 Studio classes commence: Introduction to the topic, to the site, to the tasks
Week 2	Mon 29.7 Thu 1.8	Observation: site investigation Observation: case study investigation
Week 3	Mon 5.8 Thu 8.8	Experimentation: massing model Experimentation: unit model
Week 4	Mon 12.8 Thu 15.8	Proposition: functional programme Proposition: circulation diagrams/scheme
Week 5	Mon 19.8 Thu 22.8	Proposition: structural diagram Proposition: building envelope conceptualization
Week 6	Mon 26.8 Thu 29.8	Proposition: the previous material to be collapsed into a presentation: sketches, diagrams, images Design 6 Mid-semester crits
		MID-SEMESTER BREAK
Week 7	Mon 16.9 Thu 19.9	Proposition: two sections of the building Proposition: two floor plans (ground + one residential)
Week 8	Mon 23.9 Thu 26.9	Proposition: key material to be collected in a concise and effective visual presentation D6 full group cross-crit
Week 9	Mon 30.9 Thu 3.10	Proposition: one to one meetings Proposition: one to one meetings
Week 10	Mon 7.10 Thu 10.10	Proposition: one to one meetings Proposition: one to one meetings
Week 11	Mon 14.10 Thu 17.10	Towards the final crit: one to one meetings Towards the final crit: one to one meetings
Week 12	Mon 21.10 TUES 22.10	Pin Up: 5-6pm, Mon, 21 Oct Final Crit: 9am, Tues, 22 Oct

RESOURCES

Books:

- *Venturi R., Scott Brown D., Izenour S., Learning from Las Vegas, Cambridge, Mass., MIT Press 1972*
- *Schmidt III R., Austin S.A, Adaptable architecture: theory and practice, London; New York: Routledge, 2016*
- *Knaack U., Façades: principles of construction, Boston: Birkhäuser, 2014.*
- *Schneider T., Till J., Flexible housing, Oxford, UK: Architectural Press, 2007*
- *Ferré A., Salij T.H., Total housing: alternatives to urban sprawl, Barcelona, New York: Actar, 2010*
- *O'Cofaigh E., Olley J. A., Lewis J. O., The Climatic Dwelling: An Introduction to Climate-Responsive Residential Architecture, London: James & James, 1996.*
- *Schwartz-Clauss M., et al., Living in motion: design and architecture for flexible dwelling, Weil am Rhein: Vitra Design Museum, 2002*
- *Kronenburg R., Flexible: architecture that responds to change, London: Laurence King, 2007*

Other resources and examples:

- *https://www.irbnet.de/daten/iconda/CIB18882.pdf*
- *https://pdfs.semanticscholar.org/80ba/b457093c54bb435cda53f78eb1adb23d5e65.pdf*
- *https://www.archdaily.com/catalog/us/products/12932/egger-osb-in-albisrieden-free-warehouse-egger*
- *https://www.archdaily.com/576302/songpa-micro-housing-ssd*
- *https://www.archdaily.com/463725/armagnac-habiter-autrement-ateliers-jean-nouvel*
- *https://www.archdaily.com/918415/san-vicente935-housing-lorcan-oherlihy-architects*

Additional resources will be shared with the students during the semester

REQUIRED PRODUCTION

Mid-semester crit: A3 tables containing: site plan, programme, pictures of the models, circulation and structural diagrams, building envelope visualization.

Cross-crits: TBD

Final Crit:*

- *Site plan/masterplan*
- *Programme scheme*
- *Structural diagram*
- *Floor plans: ground, 2 residential levels*
- *Elevations (2)*
- *Sections (2)*
- *Axonometry of 1 unit*
- *Views/renderings*
- *Façade architectural details*
- *1 detail from ARCHTECH 312*
- *Model of a portion of the building, scale 1:50*

**Please note that minor changes to this list can be agreed with the tutor according to the characteristics of each project.*

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 301 Design 6 Course Outline (on Canvas).

LEARNING OUTCOMES

General Course Outcomes (in black) and **Specific Topic Outcomes** (the ways this studio topic will engage the general course outcomes) in red:

- 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.
- *Specific Outcome Theory: show evidence of engagement with relevant areas of architectural theory and knowledge related to adaptable architectures and show evidence of their influence in the 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.
- *Specific Outcome Architectonics: demonstrate the ability to develop the tectonic and technological characteristics of the project through the presentation of key material.*

- Programme: Show evidence of engagement with identified cultural, social and functional positions as they might inform speculative architectural propositions.
- *Specific Outcome Programme: demonstrate how the design solutions are able to respond to specific social and cultural needs.*

- 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.
- *Specific Outcome Performance: demonstrate the ability to exploit external environmental conditions to optimize the design of the building and, at the same time, optimize the interior spaces according to the defined programme/goals.*

- Form and space: Demonstrate abilities to develop speculative three dimensional architectural form and space.
- *Specific Outcome Form and space: demonstrate abilities to develop the design of an adaptable space, both interior and exterior.*

- Media: Display skill in the communication and development of design propositions through the considered use of architectural media.
- *Specific Outcome Media: display skill in the communication of design propositions through the use of the architectural media that you consider the most appropriate.*