



**2012 | ARCH7111/2 | ELECTIVE DESIGN STUDIO**  
Course Outline

**ARCHITECTURE PROGRAM**  
Architectural Design

**STUDIO TITLE: THE SUPERMODEL**

**STUDIO TUTOR: RUSSELL LOWE**



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## Course staff

- Course Convener: Andrew Macklin  
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- Studio Tutor: Russell Lowe  
email: russell.lowe@unsw.edu.au

## Course details

- 6 UOC
- 5 Hours per week contact time

*(Expected student workload: 25-30 hours per unit of credit as determined by the UNSW Academic board. Differently put, this course requires approximately 150 to 180 hours of work across 12 weeks. So, in addition to the 5 hours of class contact time per week, each student is expected to spend 7.5-10hrs hours of independent study during each semester week.)*

## Studio locations and class time

- Red Centre West Wing (labs booked: RC3034 9-14hrs, RC2033 9-11hrs, RC2033 13-16hrs)
- Monday: 9am to 2pm.

## Course aims/Handbook description

Students select from a range of design elective studio options offering a specific architectural exploration. Elective focus will be informed by research expertise and pedagogical aims from within a variety of academic streams: history and theory; building technology and environmental science; practice; architectural communications and representation; computing and digital technology. Studio-based projects typically require the design of medium to large-scale building and/or developments, with complex constraints and requirements, to an ambitious level of programmatic, spatial and material integration and resolution; or of highly ambitious, experimental and imaginative projects.

## Studio Description

This studio will focus on one of architecture's primary modes of investigation; the model. As a critical part of the design process the model expresses ideas and concepts in three dimensions with concern for materials, lighting, space and, nowadays, interactivity; in other words the model literally presents all of the components of a finished architecture. Traditionally architectural models have been hand-made which both reflected the building process of the time and a cultural longing by architects to be more directly involved in the production of their work (many architects design products, especially furniture, for the same reason). But for some time now architecture has been tending towards the assembly of factory made components; and, as can be seen across the world, factories tend towards automated machine-made production. It's worthwhile to point out at this stage that beautiful things are created in factories ... Porsche, Honda, Apple, Prada and Boeing (to name a few) all use factories to

create amazingly sophisticated products; most for a fraction of the cost of the average architect designed house.

If architectural models should reflect both the finished architecture and its mode of production they will need to employ automated processes such as digital modelling, laser cutting and rapid prototyping. However, this studio isn't dogmatic; one hand-made process will also be employed (hot-wire cutting blue foam). In this studio students will be trained to use the laser cutter, rapid prototypers and hot wire cutters and have direct access to all three types of machines.

The aim of this studio is to take every students architectural modelling to the next level. To be successful in this studio ones models will be well made, beautiful and fashionable; worthy of the title Supermodel.

In this studio students will use the modelling process to design three houses.

Clients: Miranda Kerr, Kate Moss, Agyness Deyn

### Student learning outcomes

By the end of the course the students will have:

- Thinking through modelling. Challenging domestic architecture.
- Care and precision in fabrication.
- Sophistication in assembly.
- Critically documenting a design process.
- Safe working practices.

### Assignments

Submission Number	Weighting	Description	Rational in relation to the learning outcomes
<i>Assignment 1</i>	20%	<i>House 1, assessed via each students blog. Digital models, sample components, still and moving images. 1:100 scale physical model, site less.</i>	<b>Design, fabrication, assembly, critical documentation, safe working practices; skill introduction.</b>
<i>Assignment 2</i>	30%	<i>House 2, assessed via each students blog. Digital models, sample components, still and moving images. 1:100 scale physical model, on a</i>	<b>Design, fabrication, assembly, critical documentation, safe working practices; skill development.</b>

		<i>base.</i>	
<i>Assignment 3</i>	<i>40%</i>	<i>House 3, assessed, via each students blog. Digital models, sample components, still and moving images. 1:100 scale physical model, on a site.</i>	<b>Design, fabrication, assembly, critical documentation, safe working practices; skill mastery.</b>
<i>Assignment 4</i>	<i>10%</i>	<i>Participation</i>	<b>Contribution to the culture of ‘making’ within the studio group.</b>

### Assessment Criteria

In general, your work will demonstrate the application and integration of your knowledge and prior learning relevant to architectural model making and documentation. The course is assessed by assignment work based on the submissions set throughout the Session. All of these assessments are based on individual work presented via each students blog. Your work will be assessed based on the following framework:

- **Quality of fabrication-** is the model well built?
- **Imagination-** is your model inventive? Or have you creatively repurposed a modelling concept/technique/strategy from the past?
- **Rigor-** is there a logic driving the selection of each material type?
- **Fashion and Beauty** – does your architecture address both of these concepts in a significant and distinctive way (especially in relation to domestic architecture)?
- **Program-** is your architecture a believable house for a supermodel?
- **Formal Configuration-** how ingenious is your organization of cavities, solids, walls, skins, rooms, circulations, columns, beams, ceilings, doors, windows, openings, enclosures, roofs, outdoor and indoor spaces?
- **Construction and Structure System-** does your model materialize the above aspects of your project?
- **Documentation** – is your documentation comprehensive and inventive in its own right?

**Important Notes:** You will not receive any mark, or any useful critique if your **Idea** is not ‘materialized’ through built forms, and in architecture. In other words, mere verbalization will not be considered as having an architectural idea.

Resolution and evidence are required for:

**Process** – that is, every week, building the project up from week to week, with evident and noticeable development, and with increasing complexity and comprehensiveness of resolution.

**Product** – that is, in the submissions, evidenced in the quality of representational material produced and exhibited.

The **degree** to which resolution and evidence of integral co-operation, across all 8 listed aspects, has been explored, and demonstrated or evidenced – both in the design process, from week to week, and in the final submission – will form the basis for criteria in evaluation and assessment in the course.

## Course schedule and content

- Week 1 – 29th July
- Week 2 – 5th August
- Week 3 – 12th August
- Week 4 – 19th August
- Week 5 – 26th August (self-directed study; Russell will be away this week)

**(submission 1, due by 9pm Sunday 1<sup>st</sup> September)**

- Week 6 – 2nd September
- Week 7 – 9th September
- Week 8 – 16th September
- Week 9 – 23rd September – non-teaching week
- Mid- semester break – 30th September – 6th October
- Week 10 – 7th October, public holiday (Labour Day)

**(submission 2, due by 9pm Sunday 13<sup>th</sup> October)**

- Week 11 - 14th October
- Week 12 – 21st October
- Week 13 – 28th October

**(submission 3, due by 9pm Monday 11th November)**

### Week 1, 29<sup>th</sup> July

9am to 2 pm

**Introduction and Discussion of the Supermodel:** The Arch7112 Course outline fully explained. Studio tutor to discuss the expectations of the studio against the background of the Arch 7111 course outline. Questions and answers between the studio tutor and the students.

**Introduction to Submission 1:** overview of the outputs required and the assessment framework for this assignment via the feedback and review sheet; blue foam modelling tutorial.

**Independent study:** complete set tutorials; rebuild blue foam model in sketchup, create a 2d version of the digital model using slicer, slice modeller, or the unfold tool; upload screen capture time-lapse (Chronolapse).

### Week 2, 5<sup>th</sup> August

9am to 2 pm

**Laser Cutting Tutorial:** at the FBE Design Lab; sketchup laser cutting tutorial.

**Independent study:** export 2d version of your blue foam model as a \*.dwg file to illustrator; layout, join lines and repair any gaps; laser cut the result; assemble; upload digital images.

### **Week 3, 12<sup>th</sup> August**

9am to 2 pm

**Design exam:** 6hr exam to design house 1.

**Independent study:** complete project component list and timeline; create “water-tight” digital components, laser cut components; create blue foam components; create first draft assembly; upload digital images.

### **Week 4, 19<sup>th</sup> August**

9am to 2 pm

**Design development:** fabricate first rapid prototyped component;

**Independent study:** create final draft assembly.

**Week 5, 26<sup>th</sup> August** (independent Study, Russell will be away this week)

9am to 2 pm

**Final fabrication and assembly:** in class.

**Independent study:** complete house 1 and documentation by 9pm Sunday 1<sup>st</sup> of September.

**(submission 1, due by 9pm Sunday 1<sup>st</sup> September)**

### **Week 6, 2<sup>nd</sup> September**

9am to 2 pm

**Introduction to Submission 2:** overview of the outputs required and the assessment framework for this assignment via the feedback and review sheet; laser cutting acrylic.

**Independent study:** digitally model a base and acrylic cover to support and protect house 2; laser cut base and cover.

### **Week 7, 9<sup>th</sup> September**

9am to 2 pm

**Design Exam:** 6hr exam to design house 2 on a base with a cover.



**Independent study:** complete project component list and timeline; create “articulated” digital components, laser cut components; create blue foam components; create first draft assembly; upload digital images.

**Week 8, 16<sup>th</sup> September**

9am to 2 pm

**Design development:** fabricate first rapid prototyped articulated component;

**Independent study:** create final draft assembly; complete house 1 and documentation by 9pm Sunday 13<sup>th</sup> of October.

**Week 9, 23<sup>rd</sup> September** (non-teaching week)

**Mid- semester break – 30th September – 6th October**

**Week 10, 7<sup>th</sup> October** (public holiday (Labour Day))

(submission 2, due by 9pm Sunday 13<sup>th</sup> October)

**Week 11, 14<sup>th</sup> October**

9am to 2 pm

**Introduction to Submission 3:** overview of the outputs required and the assessment framework for this assignment via the feedback and review sheet; laser cutting plywood.

**Independent study:** digitally model a set of landscape contours to situate house 3; laser cut plywood contours.

**Week 13, 21<sup>st</sup> October**

9am to 2 pm

**Design Exam:** 6hr exam to design house 3 on a landscape.

**Independent study:** complete project component list and timeline; create “experimental/impossible” digital components, laser cut components; create blue foam components; create first draft assembly; upload digital images.

**Week 13, 28<sup>th</sup> October**

9am to 2 pm

**Design development:** fabricate first rapid prototyped experimental/impossible component;

**Independent study:** create final draft assembly; complete house 3 and documentation by 9pm Monday 11<sup>th</sup> of November.

(submission 3, due by 9pm Monday 11th November)

## Studio Blog

Information in this course outline is subject to change at the discretion of the course convenor. Students enrolled in this course are required to check the following blog site on the regular basis to receive updates and further instructions for this studio:

<http://arch7112-RL-2013.blogspot.com>

## Grades and Marks

In accordance with the university policy the distribution range of marks in relation to grades and their descriptor are as follows.

<i>Grade</i>	<i>Mark Distribution</i>	<i>Academic Standard</i>
HD - High Distinction	85 - 100	Outstanding performance
DN - Distinction	75 - 84	Superior performance
CR - Credit	65 - 74	Good performance
PS - Pass	50 - 64	Acceptable performance
PC – Pass Conceded	45 - 50	Borderline performance
FL - Fail	0 - 45	Failure: performance below minimum level of competence
AF – Absent Fail	0	The student has not completed any assessment. Subsequent submission of work will not be accept
WJ		Assessment withheld due to academic misconduct.

## ADMINISTRATIVE MATTERS

The **Built Environment and UNSW Academic Policies** document supplements this course outline providing detail on academic policies and other administrative matters. It is your duty as a student to familiarise yourself with the policies and guidelines as not adhering to them will be considered as academic misconduct. Ignorance of the rules is not an acceptable defence.

The document can be found in your Blackboard course as well as:  
<http://www.be.unsw.edu.au/student-intranet/academic-policies>

It covers:

- Built Environment Student Attendance Requirements
- Units of Credit (UOC) and Student Workload
- Course and Teaching Evaluation and Improvement (CATEI)
- Academic Honesty and Plagiarism
- Late Submissions Penalties
- Special Consideration - Illness & Misadventure
- Extension of Deadlines
- Learning Support Services
- Occupational Health & Safety

# Feedback and Review Sheet

STUDENT NAME AND ID:	
STUDIO TUTOR:	
WEEK:	

ASPECT/ISSUE	SCALE 1-5: (5 is better than 1).				
<b>1. Quality of fabrication-</b> is the model well built?					
<b>2. Imagination-</b> is your model inventive? Or have you creatively repurposed a modelling concept/technique/strategy from the past?					
<b>3. Rigor-</b> is there a logic driving the selection of each material type?					
<b>4. Fashion and Beauty</b> – does your architecture address both of these concepts in a significant and distinctive way (especially in relation to domestic architecture)?					
<b>5. Program-</b> is your architecture a believable house for a supermodel?					
<b>6. Formal Configuration-</b> how ingenious is your organization of cavities, solids, walls, skins, rooms, circulations, columns, beams, ceilings, doors, windows, openings, enclosures, roofs, outdoor and indoor spaces?					
<b>7. Construction and Structure System-</b> does your model materialize the above aspects of your project?					
<b>8. Documentation</b> – is your documentation comprehensive and inventive in its own right?					

HD	DN	CR	PS	FL	LF	AF	GRADE
85- 100%	75-84%	65-74%	50-64%	35-49%	1-34%	No Submit	