Faculty of Architecture, Landscape and Visual Arts
The University of Western Australia

ARCT5500/5501 DESIGN STUDIO Semester One 2007

Coordinator: Dominic Snellgrove dominic.snellgrove@ccnwa.com.au
Assistant: To Be Confirmed

Project: Sustainable Living-Reinventing The Way we Live

Buildings Are Responsible For:
- Consuming 32% of the world’s resources
- Using 12% of the world’s water
- Consuming up to 40% of the world’s energy
- 40% of waste going to landfill
- 40% of emissions to air
- Domestic Buildings are Responsible for 38% of Green House Gas Emissions

Project Stages: Part I

The project will require a detailed precedent study of relevant benchmark multi-residential and mixed use buildings, along with a review of the site and its surroundings to establish critical master plan strategies for a sustainable multi-residential mixed use development.

Wellington Street Perth
Part II

A detailed building proposal will explore ideas associated with the sustainable multi-residential mixed use project and propose a detailed residential mixed use design solution responding in part to the introduction above and in part to your thorough investigation and analysis of the way in which we can live more sustainably both from an environmental and social perspective. The studio will place particular emphasis on sustainable design solutions that embrace social, environmental and economic objectives.

Planning Controls: It is not an intention of this brief that you necessarily conform to the planning controls or any particular design guidelines. You are offered the opportunity to assess the existing controls and make an argument for either maintaining their intent and detail or varying the controls. You will need to develop your views in terms of:

- Building form and envelope
- Maximum and minimum heights
- Setbacks
- Open space and hierarchy
- Distribution of built form across the site
- Circulation for pedestrians, vehicles and occupants
- Public domain amenity
- Environmental considerations
- Architectural character

Considerations: This project asks you to challenge the precepts surrounding multi-residential design, for the philosophical reasons set out in the introduction and to ask the following questions:

- What could constitute the sustainable home environment?
- What range of facilities should it incorporate for stakeholders and users?
- How do people wish to occupy domestic space
- What will be your strategy for flexibility and adaptability
- How will you approach this problem from a humanistic viewpoint?
- What sort of environmental considerations will you incorporate in a climate like Perth’s?
- Is carbon neutral or even carbon positive a possibility in the high density domestic context
Your final project should articulate your position in relation to these questions. You will need to reflect upon the nature of the way we live and generate your architectural concept from this. How this “fits in” to the envisioned public domain will be a question of synthesis and studio discussion.

Reference List:  
The project is concerned with the act of making a building that successfully legislates between its internal program and contribution to the making of a humanistic public domain. Most texts related to the built environment touch on these themes.

“HIGH DENSITY HOUSING”  
Concepts Planning Construction  
Christian Schittich  
In DETAIL Birkhauser  

“SOLAR ARCHITECTURE”  
Christian Schittich  
In DETAIL Blinkhausen  

“CITIES FOR A SMALL PLANET”  
Richard Rogers  
Faber + Faber  

“THE WESTERN AUSTRALIAN STATE SUSTAINABILITY STRATEGY”  

“GREEN BUILDING COUNCIL OF AUSTRALIA”  
Web Site www.gbcaus.org  

“RAIA ENVIRONMENTAL DESIGN GUIDE”  
Periodical loose leaf publication available through RAIA  

“GRUNDRISSTALTAS wohnungsbau 2004  
FLOOR PLAN MANUAL  
Friederike Schneider  
Birkhauser  

“LE CORBUSIER COMPLETE WORKS IN 8 VOLUMES”

Studio Times:  
The studio will operate on Monday and Thursday afternoons between 4pm and 7pm. All sessions, apart from site visits, will take place in room 3.20. Dominic Snellgrove is scheduled to teach 3 hours on Monday and 3 hours on Thursday. An additional assistant will be available to teach 3 hours on both Monday and Wednesday (Student Numbers Permitting).

Studio Objectives:  
The standard objectives for Year 5 design studios are listed below:

- Develop abilities to design at a fully resolved level in projects of substantial complexity
- Develop design proposals and a full range of architectural knowledge at a professional level
- Develop ability to integrate advanced knowledge of technological areas of study

In addition to this the following represents a project specific list of objectives:
• To research, document and develop a detailed knowledge of well known examples of one of the ubiquitous generic building types that contribute to the fabric of the city - the office or workplace.

• To develop an understanding of an urban site, and the rules and constraints that may apply to it. To then make a proposal for a planning strategy for development on that site, reconciled to a user brief.

• To develop an understanding of the symbiotic relationship that exists between built form and the public realm.

• To develop and propose an architectural solution (form and detail) that positively enhances planning objectives, and that makes a strong contribution to the quality of its physical and environmental context.

• To explore the relationship between interior space and external form in the design of a piece of architecture.

• To understand and speculate upon the future nature of the work environment.

• To demonstrate a philosophical approach to the design of a building façade.

• To demonstrate an application of contemporary values with regard to responsible leading edge environmental design.

Submissions: Submission dates are as indicated in the following studio timetable.

1. Research/Masterplan Weeks 1-3
   - Precedent Studies,
   - Site Analysis,
   - Analysis of Master Plan and recommendations
   - Development of Anticipated Sustainable Initiatives
   - Presentation of outcomes

2. Architectural Project: Weeks 4-13
   - Concept Design Residential
   - Reconciliation of Brief requirements
   - Developed Design
   - Detailed Design (tectonics)

Submission Requirements:

1. Research/Masterplan Weeks 1 - 3
   - One formatted A3 Precedent Study prepared by each student
   - Completed site analysis – critical observations/site selection
   - Master Plan analysis – critical observations
   - Built form – alternative options
   - Developed User Brief – Residential/Sustainability
   - Completed Tutorial Group site model.

2. Architectural Project: Weeks 4 - 13
   - Four A1 panels mounted on 5mm foam core, including the following:-
     - 1:1000 Context Plan.
     - 1:500/200 Site Plan/Ground Plan.
• 1:100 Typical Floor Plan(s)
• 1:200 diagrammatic Roof Plan and Basement Plan.
• 1:200 Typical cross section(s) as required.
• 1:20 Facade detail(s)
• Explanatory diagrams of:
  - Proposed building construction,
  - Proposed cultural concept and strategy
  - Service and environmental systems
• 3D representations demonstrating:
  - Character and intended nature of the modern home
  - The building in its setting.
• 1:200/1:100 model of proposed building (white/grey card/plastic and/or
timber)
• 1:50/1:20 detail model of facade bay.

NB: Staff reserves right to change this as the studio develops and if so
students will be notified in writing with a studio Memo.

All hard copy group information is to be held in the designated storage box in
the ALVA Resource Room.
A website is to be established for the storage of electronic information.

**Credit:**

12 credit points

**Year Moderator:**

A year moderator will be appointed who will be responsible for over viewing
the marking of all studios across the faculty in years 5. The year
coordinator, Geoffrey London will act as an arbiter in regard to any issues staff
and students might have with their studio.

**Assessment:**

Design units are assessed 100% by final folio submission. For the folio to be
considered complete it must include all submission requirements for all
projects listed in the studio guide. The folio constitutes a final set of
presentation drawings and associated items as per the studio requirements as
well as a folio of related process and research work. Each project is given a
weighting proportionate to the time the studio devoted to it. A panel of at least
3 including studio coordinator/s, year moderator and one other staff member
marks the folio. The presence of a moderator ensures equity across the range
of studios at a given level. As folios are marked with no knowledge of the
author’s identity students must not write their name on the folio.

Folios are assessed according to the following criteria.

<table>
<thead>
<tr>
<th>AREAS OF PERFORMANCE</th>
<th>OUTCOME STATEMENTS for Level 5</th>
<th>ASSESSMENT CRITERIA aligned to outcomes</th>
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<tbody>
<tr>
<td>CONCEPT Innovation, speculation, poetics</td>
<td>Define personal values systems and ethical positions in response to complex architectural project requirements</td>
<td>Demonstration of advanced level of innovation in devising appropriate responses for architectural projects</td>
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<td>DESIGN DEVELOPMENT refinement, resolution, completeness</td>
<td>Resolve at a professional level architectural propositions of substantial complexity</td>
<td>Demonstration of capacity to complete detailed architectural propositions</td>
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<tr>
<td>TECHNICAL INTEGRATION Tectonics, environmental, sustainability</td>
<td>Integrate to a professional level advanced technical and environmental knowledge in the resolution of an architectural proposition</td>
<td>Demonstration of detailed knowledge of construction elements and building components and methods</td>
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<tr>
<td>CONTEXTUAL</td>
<td>Incorporate the breadth of</td>
<td>Demonstration of capacity to</td>
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</table>
### Awareness

Social, ethical, historico-theoretical professional concerns impacting upon the design process make architectural propositions that are contextually responsive.

### Communication & Presentation

Deploy the full range of architectural communication skills at a professional level. Demonstration of comprehensive and commanding enunciation of architectural proposition.

The research/master plan work will constitute 25% of the overall assessment. The architectural project will constitute 75%.

**Feedback:**

Points 1-5 above are also the criteria upon which interim written feedback is based. Feedback is a guide only and final assessment will be by folio submission. Feedback may be classified as satisfactory, borderline or unsatisfactory. In addition, the design coordinator/s will make general comments and recommendations. Feedback forms will be issued in Week 9. In addition to the written feedback all students will receive verbal feedback on their work through individual and group crits which will occur weekly and through the timetabled juries. This feedback is given during designated studio hours and is therefore dependent on attendance.

**Assessment:**

The folio receives a mark out of 100 which fall into one of 5 bands.

1. Fail = <50
2. Pass = 50-59
3. Credit = 60-69
4. Distinction = 70-79
5. High Distinction = 80-100.

If a folio is deemed to be below 50 by the initial group of assessors it is tabled for further review by Year Moderator, Discipline Chair, Studio Coordinator and either the Dean or Associate Dean. Failed folios can be appealed (see below) but only graduating folios receiving a mark of between 45 and 49% can be returned to students by the faculty with a formal request for supplementary work in order to pass.

**Folio collection:**

Folios can be collected after the university has formally issued marks. If a folio is subject to appeal it can not be collected and will be lodged by the studio coordinator in a place designated by the Dean or Associate Dean. If a folio is used for exhibition then the student must write their name on the back of the work so that when the exhibition is demounted collection is simplified.

**Attendance:**

Under University General Rule 2.1.15(1) students are required to attend prescribed classes and submit work at an acceptable standard. Under University General Rule 2.1.16 the Faculty may withdraw a student from a unit if their attendance at classes and performance is not satisfactory in terms of University General Rule 2.1.15(1).

**Materials & Equipment Costs**

Group work and/models will be subsidized by the faculty. All other models will be funded by the student.

**Communication:**

Outside studio hours communication will occur by email, so all students should ensure
(a) that they activate a Pheme account and advise staff of their email address;
(b) that they check their account regularly (at least weekly)
(c) that any email communication with University staff be through their student account only. (Staff have been advised not to respond by email to any other addresses.)
Monday and Thursday afternoon studios

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<tr>
<th>Mon</th>
<th>Thur</th>
<th>Date</th>
<th>Event</th>
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<tr>
<td>1</td>
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<td>26 Feb</td>
<td>Introduction session</td>
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<tr>
<td></td>
<td>1</td>
<td>Mar</td>
<td>Project 1: Research &amp; Masterplan</td>
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<td></td>
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<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>15</td>
<td>Project 1: Submission Jury</td>
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<td>19</td>
<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>29</td>
<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>April</td>
<td>Interim submission: JURY</td>
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<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>7</td>
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<td>Non-Teaching Week</td>
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<td>Non-Teaching Week</td>
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<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>4.00pm-7.00pm: Project Discussion in Groups</td>
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<td>13</td>
<td>21</td>
<td>FINAL JURY</td>
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<td>24</td>
<td>Folio Week</td>
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<td>Folio Submission</td>
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<td>May</td>
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Staff reserve right to change the timetable as the studio evolves and if so, students will be advised of the changes in writing.