

# ABPL90049 Environmental Design

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	This subject is not offered in 2014.
<b>Time Commitment:</b>	Contact Hours: 1 x 2 hour tutorial weekly and 1 x 2 lectures throughout the semester Total Time Commitment: 120 hours
<b>Prerequisites:</b>	Admission into a course at the Melbourne School of Design.
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	702-443 (ABPL40013) Environmental Design
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.&lt;/p&gt;         &lt;p&gt;It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p>
<b>Contact:</b>	<p><b>Environments and Design Student Centre</b> Ground Floor, Baldwin Spencer (building 113)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Web: <a href="http://edsc.unimelb.edu.au/">http://edsc.unimelb.edu.au/</a> (<a href="http://edsc.unimelb.edu.au/">http://edsc.unimelb.edu.au/</a>) Email: <a href="mailto:edsc-enquiries@unimelb.edu.au">edsc-enquiries@unimelb.edu.au</a> (<a href="mailto:edsc-enquiries@unimelb.edu.au">mailto:edsc-enquiries@unimelb.edu.au</a>)</p>
<b>Subject Overview:</b>	<p>Introduction to design related theories, strategies and projects responding to environmental issues in architecture. The subject will cover environmental design as a general concern with an emphasis on architectural design innovation (including greenery and site planning) but also covering related fields like environmental art as well as product and commercial design. Topics to be covered include:</p> <p>A Historical Introduction (Key Authors: Banham, Papanek, Schumacher, Robert and Brenda Vale, William McDonough)</p> <ul style="list-style-type: none"> <li>• Introduction to environmental issues in architecture covering the development of Modern architecture and subsequent environmental responses.</li> <li>• Learning from vernacular architecture and the role of culture and behaviour in sustainability</li> <li>• Sustainability standards – Green Star, LEED, BREEAM, etc.</li> </ul> <p>Environment and Bioclimatic Design (Exemplary Architects: Ken Yeang, Renzo Piano, Glenn Murcutt, Troppo)</p> <ul style="list-style-type: none"> <li>• Energy</li> <li>• Ecological services</li> </ul> <p>Ecology and Nature (e.g. Calatrava, Emilio Ambasz, Thomas Herzog, Herzog &amp; de Meuron)</p> <ul style="list-style-type: none"> <li>• Green infrastructure</li> <li>• Arcadia</li> <li>• Biophilia and biomimicry</li> </ul> <p>Sustainable Materials</p> <ul style="list-style-type: none"> <li>• Paper (Shigeru Ban)</li> <li>• Bamboo (Vo Trong Nghia)</li> </ul> <p>Culture and Society (e.g. Peter Zumthor, Glenn Murcutt, Juhani Pallasmaa, Stephen Holl)</p> <ul style="list-style-type: none"> <li>• Environmental art, design and fashion</li> </ul>

	<ul style="list-style-type: none"> <li>• New materials and technology</li> <li>• Lifestyle changes</li> <li>• Affordances and sensory aesthetics</li> <li>• 3Rs – sustainability in design, e.g. trash design, sustainable fashion</li> </ul> <p>Emerging Issues and Future Visions (e.g. MVRDV, BIG, ARO, Deaker Yeadon)</p> <ul style="list-style-type: none"> <li>• Climate change and natural disasters</li> <li>• Ethical design; designing for fun, happiness and well-being; harmony with nature</li> <li>• Future technology and visions – urban agriculture, biofuels, etc</li> </ul>
<b>Learning Outcomes:</b>	To provide an appreciation of design responses and practices arising from the environmental agenda which results in innovation and change in the expression of architecture.
<b>Assessment:</b>	Continuous assessment, leading to a submission or presentation every 3 weeks. The assignments may involve class presentations, discussions of selected topics, short exercises and essays, and groupwork. 3 such assignments due 3rd, 6th and 9th week – each valued at 20%, (60% total). A written submission not exceeding 3000 words, due end of Semester, 40%.
<b>Prescribed Texts:</b>	Banham, R. (1984). The architecture of the well-tempered environment (2nd ed). Chicago: University of Chicago Press. Benyus, J. M. (2002). Biomimicry : innovation inspired by nature. New York: Perennial. Hawkes, D. (2008). Environmental imagination : technics and poetics of the architectural environment. London: Routledge. Kellert, S. R., Heerwagen, J., & Mador, M. (2011). Biophilic design : the theory, science and practice of bringing buildings to life. Hoboken: John Wiley & Sons. Papanek, V. (1985). Design for the real world : human ecology and social change (2nd ed., completely revised). London: Thames and Hudson. Yeang, K., & Spector, A. (eds.). (2011). Green design : from theory to practice. London: Black Dog
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<p>On completion of the subject students should have developed the following skills and capabilities:</p> <ul style="list-style-type: none"> <li># An understanding of the implications of sustainable issues on lifestyle, society, and technology and the consequent effects on urban and architectural design;</li> <li># An awareness and understanding of the impact of sustainability on related design fields and art</li> <li># An awareness of formal and aesthetic developments in design and architecture resulting from the environmental imperative</li> </ul>
<b>Related Course(s):</b>	<p>Master of Architecture  Master of Architecture  Master of Design (Urban Design)  Master of Urban Design  Postgraduate Diploma in Planning and Design</p>
<b>Related Majors/Minors/Specialisations:</b>	<p>Energy Efficiency Modelling and Implementation  Energy Efficiency Modelling and Implementation  Energy Studies  Energy Studies  Melbourne School of Design multidisciplinary elective subjects  Tailored Specialisation  Tailored Specialisation</p>