

702-254 Waste Systems and Housing Construction

Credit Points:	25.00
Level:	2 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Summer Term, - Taught on campus.
Time Commitment:	Total Time Commitment: contact hours - 120,
Prerequisites:	880-104 Designing Environments or 702-101 Architectural Design 1A or 702-103 Architectural Design 1B or 702-104 Architectural Design Studio 1C or equivalent.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	Students undertaking this subject will be required to regularly post their design work onto the subject's LMS based Wiki. This is in order to engage in feedback with their peers. The subject involves extensive manual work: Both model making, drawing and full scale building on-site, in the elements and on uneven ground.
Coordinator:	Dr Peter Raisbeck
Subject Overview:	This subject addresses two key areas of concern to the world today - the need for new affordable housing and the need to dispose of the waste generated by today's consumer culture. Students will be required to design shelters or building elements from refuse. The subject will allow students to imagine how to built syatems might mimic natural systems where the concept of waste does not even exist. The subject will use an interdisciplinary approach, where student teams from the disciplines of architecture, landscape architecture, construction, engineering and planning will work collaboratively.
Objectives:	<ol style="list-style-type: none"> 1 Research, analyse and map waste systems related to the housing sector. 2 Design and construct a prototype structure using waste materials. 3 Document the design, prototyping and construction processes. 4 Reflect on how team processes can enhance construction innovation.
Assessment:	2500 word group research project consisting of a waste mapping research and analysis exercise (10% group and 10% individual assessment) due at the end of week 1. Project to the equivalent of 5000 words - as part of a team, design and construct a prototype structure using waste materials (50%; 20% of which will be based on peer review assessment) due at the end of week 3. A 2000 word team journal which documents the prototyping process (20%) due at the end of week 4. 1000 word individual reflection (10%) due at the end of week 4
Prescribed Texts:	Cradle to Cradle, Remaking the Way We Make Things, William McDonough & Michael Braungart, North Point Press 2002 ISBN 0-86547-587-3 Design like you give a Damn, Edited by architecture for humanity, Metropolis Books, 2006, ISBN 1-933045-25-6 Superuse : constructing new architecture by shortcutting material flows, Ed van Hinte, Cesare Peeren, Jan Jongert, Rotterdam : 101 Publishers , 2007 ISBN 9789064505928 (pbk) 9064505926 (pbk)
Recommended Texts:	<p>Architecture without Architects, A short introduction to non-pedigreed architecture, Bernard Rudofsky</p> <p>Garbage Housing, Martin Pawley, (London) Architectural press , 1975, ISBN 0851392407</p> <p>Built By Hand,</p>

	Vernacular buildings around the World, Bill Steen, Athene Steen, Eiko Kim Gibbs Smith Publisher 2003 ISBN 1-58685-237-x
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<ol style="list-style-type: none"> 1 Creative response to complex problems that require solutions based on prototypes. 2 Appropriate use of systems and innovation terminology. 3 The ability to link together processes of design and construction. 4 The ability to reflect on and work in teams. 5 To gain a materials-based perspective in relation to the act of design.
Notes:	It is envisaged that the students will be required to work in teams over an intensive period at the Creswick campus engaging with the materials directly: to learning by doing – building basic shelters from the waste products donated by large organizations (cardboard, plastic, rubber....)