Partner Module specification

Module Code:	ARA711

Module Title:	**Construction for Garden Design**

Level:	7	**Credit Value:**	20

Cost Centre(s):	GAAA	JACS3 **CODE**: HECoS code:	K340 100590

Faculty	Faculty of Arts, Science and Technology	**Module Leader:**	Andrew Duff

Scheduled learning and teaching hours	100 hrs
Guided independent study	100 hrs
Placement	0 hrs
Module duration (total hours)	200 hrs

Programme(s) in which to be offered (not including exit awards)	Core	Option
MA Garden Design	✓	☐
Pre-requisites		
None		

Office use only
Initial approval: 03/09/2019 Version no:1
With effect from: 03/09/2019
Date and details of revision: Version no:

Module Aims

This module develops an advanced understanding of hard materials and the application of this information to the detailed development of garden design solutions. It will enable students to produce effective and accurate working detail drawings in support of and appropriate to their creative design concepts.

To accompany the development, students will gain comprehensive knowledge in research and the source materials to progress detailed design solutions and written specifications.

Students will analyse complex issues to practically and creatively facilitate the synergy between theory and practice by resolving these issues without the loss of design integrity.

Intended Learning Outcomes

Key skills for employability

KS1	Written, oral and media communication skills
KS2	Leadership, team working and networking skills
KS3	Opportunity, creativity and problem solving skills
KS4	Information technology skills and digital literacy
KS5	Information management skills
KS6	Research skills
KS7	Intercultural and sustainability skills
KS8	Career management skills
KS9	Learning to learn (managing personal and professional development, self-management)
KS10	Numeracy

At the end of this module, students will be able to		Key Skills	
1	Produce detailed working drawings in support of their design schemes, enabling them to communicate effectively with landscape contractors and to quantify their work for costing purposes	4 10	
2	Research and prepare sample written specifications in support of their design work	1	
3	Identify and critically analyse a variety of hard landscape materials and understand their uses, technical properties and applications through appropriate research	6	
4	Resolve junctions, changes of level and other technical matters affecting their design work whilst still maintaining the basic design integrity and reflect upon successful combinations of hard materials for both functional and decorative applications	5 3	

Transferable skills and other attributes

Creative problem solving in a technical and design situation
Numeracy
Communication
Learning skills management

Derogations

None

Assessment:

Indicative Assessment Tasks:

The coursework will require the student to present diagrams and drawings to the professional level expected, best practice, to inform a contractor of works. The diagrams are required to communicate and address the constituent elements of the designs, growing in complexity as design projects demand, and the materials utilised to appropriately inform the communication of the design. The drawn work must be augmented by evidence of reference material demonstrating the material qualities of substances used in the design and influential third party designs or technical specification as appropriate.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration or Word count (or equivalent if appropriate)
1	1,2,3,4	Coursework	100%	

Learning and Teaching Strategies:

Lectures provide the information and context for the student to explore and apply their understanding of construction theory. Studio teaching sessions provide a basis for such application and tutors aim to customise this extended teaching around the students own creative ideas. This introduces depth into the study and an individually creative dimension that provides students with a one to one experience of design detail.

Formal dissemination of information through lecture leads to the drawing board work and is reinforced by research into existing details and examples of hard landscape construction. Students are encouraged to photograph and measure existing examples before researching the techniques of construction used. They are required to develop detailed design solutions for discussion in tutorials and critiques, a synthesis of research, teaching and design analysis resulting in the refinement and resolution of successful design proposals.

Selection of materials is part of the design process and students are encouraged to identify new materials source suppliers and keep abreast of developments within the industry. Much of the preparation for hard landscape design is therefore based on independent study and research, which the student brings to the studio or tutorial for ratification and dissemination.

Specialist areas of hard landscape design are introduced as the module progresses, enabling students to increase and diversify their pool of knowledge. The ability to convey and communicate their own detailed design thinking to a range of specialist and non-specialists,

including clients, project managers, contractors and specialist suppliers is developed both graphically and in terms of acquired knowledge. The intensity and directed nature of this area of study produces a high standard of understanding and awareness coupled with efficient communication skills

Syllabus outline:

Initial key lectures deliver information on materials and encourage the student to consider the context in which designers have employed them.
Research and the application of the research findings are actively encouraged with students conducting their own investigations, through site and supplier visits.
Detailed lectures facilitate the development of a problem-solving approach in each student.
A source book journal is expected to be kept evidencing their research and acquired learning.
Major design projects include the exploration of construction technique, technical requirements and the use of functionally appropriate materials and fixings. Connection of theory and concept to practical realisation.

Indicative Bibliography:

Essential reading

Carpenter, Jot D. (ed.). (1976). *The Handbook of Landscape Architectural Construction.* American Society of Landscape Architects Foundation. McLean, Virginia.

Dreiseitl, Herbert, and Dieter Grau, Karl Ludwig. (2002)**.** *Waterscapes: Planning, Building, and Designing with Water.* Birkhauser, Basel.

Ellison, D. C., W. C. Huntington, and R. E. Mickadeit. (1997). *Building Construction: Materials and Types of Construction.* 6th Edn. New York: John Wiley & Sons, NY.

Thompson, George, and Frederick Steiner (eds.).(1996)**.** *Ecological Design and Planning*. John Wiley & Sons, New York.

U.S. Environmental Protection Agency. (2003). *Constructed Wetlands for Wastewater Treatment and Wildlife Habitat: 17 case studies (SuDoc EP 1.2:W 53/7)*. Washington DC: US EPA.

Underground Space Center, Minnesota Energy Agency. (1979)**.** *Earth Sheltered Housing Design: Guidelines, Examples, and References*. Van Nostrand Reinhold, New York.

Van der Ryn, Sim and Cohen, Stuart. (2000)**.** *Ecological Design.* Washington DC: Island Press. Wolverton, B.C. 1999. *Eco-Friendly Houseplants: 50 Indoor Plants that Purify the Air*. Penguin, New York, Weidenfeld & Nicolson Illustrated, London.

Wakita, O. A. and R. M Linde. (1977). *The Professional Practice of Architectural Detailing*. John Wiley & Sons, New York.

Walker, Theodore D. (1978). *Site Design and Construction Detailing*. PDA Publishers, Mesa, Arizona.

Wolverton, B.C., and John D. Wolverton. (2001). *Growing Clean Water: Nature's Solution to Water.*

Other indicative reading

Blake, J., (1999) *Introduction to Landscape Design and Construction.* Gower Publishing Ltd London.

Entwistle, J. (2012) *Detail in Contemporary Lighting Design.* Laurence King, London

Holden, R. (2011) *Construction for Landscape Architecture (Portfolio Skills).* Laurence King, London.

McLeod, V. (2012) *Detail in Contemporary Landscape Architecture.* Laurence King, London.

Phillips, D. (2012) *Detail in Contemporary Concrete Architecture.* Laurence King Publishing

Sauter, D. (2010) *Landscape Construction.* 3rd Edn. Delmar Cengage Learning

McLeod, V. (2011) *Detail in Contemporary Glass Architecture.* Laurence King, London.

McLeod, V. (2012) *Detail in Contemporary Residential Architecture.* Laurence King, London

McLeod, V. (2010) *Detail in Contemporary Timber Architecture.* Laurence King, London.

Zimmerman, A. (2011) *Constructing Landscape [SC]: Materials, Techniques, Structural Components.* 2nd Edn. Birkhauser, Basel.