THE GLASGOW SCHOOL OF ART	**Course Specification**

Course Code:	**Session:**
PARE103	**2017/2018**

1. Course Title:
Theory of Environmental Architecture

2. Version	**Date of Production/Revision:**	**Date of Approval**
1.1	2017/2018	20 April 2016 PACAAG

3. Level:
SCQF11

4. Credits:
15

5. Lead School/Board of Studies:
Mackintosh School of Architecture

6. Course Contact:
Dr. Filbert Musau and Prof. Colin Porteous

7. Course Aims:

1. To explore the origins/history and attitudes in Environmental Architecture;
2. To develop a critical awareness of the key theories of Environmental Architecture;
3. To develop an understanding of buildings as parts of larger social, economic, environmental and energy systems;
4. To develop an ability to apply a 'first principles' questioning approach to the investigation of environmental architecture;
5. To develop an ability to take a position on theory before engaging with environmental design and/or evaluation.

8. Intended Learning Outcomes of Course:

By the end of this course students will be able to:

1. Identify the origins of different attitudes in Environmental Architecture;
2. Critically review published theory that has a specific environmental focus, distinguish various theories of Environmental Architecture, and challenge their concepts;

3. Explain the social, economic and environmental drivers of Environmental Architecture, and the importance of built environments, to be in synergy with nature;
4. Conceptualise 'environmental architecture' that places technical competence, even innovation, alongside a theoretically supported tectonic rationale; and
5. Demonstrate the ability to develop one's own insights, to take a theoretical position and critically argue its place in a given context or contemporary challenge in light of 'first principles'.

9. Indicative Content:

The content will introduce students to the work of scholars in this area such as:

1. Susannah Hagan's 2001 'Taking Shape: A new contract between architecture and nature' which promotes three criteria – symbiosis, differentiation and visibility.
2. 'Critical regionalism' and 'tectonic culture' (e.g. Kenneth Frampton);
3. The theory of detail by Edward R Ford.
4. The Hannover Principles
5. The 'cradle-to-cradle' design by William McDonough and Michael Braungart;
6. The psychophysics of our perceptual systems and environmental 'affordances' of James Jerome Gibson, etc.
7. Kiel Moe's work on buildings as manifestations of large scale energy systems
8. Dean Hawke's *Inclusive* versus *exclusive* environments
9. Simon Guy's work on the competing logics of sustainable architecture**:** Eco-Technic logic; Eco-centric logic, *Eco-aesthetic logic,* Eco-cultural logic, Eco-medical logic, Eco-social logic

Content will also introduce students to the approach to formulating Theory in the context of architectural design,

10. Description of Summative Assessment:

No.	Assessment Method	Description of Assessment Method	Weight %	Submission week (assignments) or length (exam)
1	Submission of written paper	A 3000-word *(+ or -10%)* written theoretical paper covering an area of the key theories on Environmental design in Architecture	100%	Semester 1 Week 12

10.1 Please describe the Summative Assessment arrangements:

The paper may be a critique or advancement of an existing theory (ies); or own formulated theoretical approach in the context of environmental design; or other task as agreed with tutor.

11. Formative Assessment:

11.1 Please describe the Formative Assessment arrangements:

Written feedback on a draft of the assessment paper will be provided. Students will be asked to make a presentation of their paper to receive feedback from peers and tutors

12. Collaborative:

Yes ☐	No ☒

12.1 Teaching Institutions:
The Glasgow School of Art, Mackintosh School of Architecture, and visiting lecturers with established expertise in theories of environmental architecture

13. Requirements of Entry:
Knowledge of undergraduate level architectural design and undergraduate environmental design in architecture or building services/mechanical systems,

14. Co-requisites:
1. GSA elective in Research skills 2. Building Performance evaluation 3. Environmental design and analysis

15. Associated Programmes:
MSc in Environmental Architecture

16. When Taught:
Stage 1

17. Timetable:
Two hours weekly for ten weeks.

18. Available to Visiting Students:	
Yes ☐	**No** ☒

19. Distance Learning:	
Yes ☐	**No** ☒

20. Placement:	
Yes ☐	**No** ☒

21. Learning and Teaching Methods:		
Method	**Formal Contact Hours**	**Notional Learning Hours** (Including formal contact hours)
Lecture	14	14
Studio	N/A	
Seminar/Presentation	4	4
Tutorial	1 (Three tutorials of 20 min each on assessment paper)	1
Workshop	N/A	

Laboratory work	N/A	
Project work	N/A	
Professional Practice	N/A	
E-Learning / Distance Learning	N/A	
Placement	N/A	
Examination	N/A	
Essay	1 (for feedback on a complete draft of assessment paper)	51
Private Study	N/A	80
Other (please specify below)	N/A	
TOTAL	**20**	**150**

22. Description of "Other" Teaching and Learning Methods:
23. Additional Relevant Information:

24. Indicative Bibliography:

Fitch, J. M. and Bobenhausen, W. (1999). *American Building: The environmental forces that shape it.* Oxford: Oxford University Press.

Sassi, P. (2006). *Strategies for Sustainable Architecture.* London: Taylor & Francis.

McDonough, W. and Braungart, M. (2003). *The Hannover Principles: Design for Sustainability.* 10th anniversary ed. Virginia and San Francisco: William McDonough & Partners.

Braungart, M. and McDonough, W. (2009). *Cradle to Cradle: Re-making the way we make things.* New York: Vintage.

Banham R. (1969). *The Architecture of the Well-tempered Environment.* London: Architectural Press.

Hawkes, D. (1996). *The Environmental Tradition: Studies in the Architecture of Environment.* London: Routledge.

Hawkes, D. (2007). *The Environmental Imagination: Technics and Poetics of the Architectural Environment.* Abingdon, Oxford: Taylor & Francis.

Hawkes, D. (2007). *The Selective Environment: An Approach to Environmentally Responsive Architecture.* London: Routledge.