UNIVERSITY OF LINCOLN

ARC2004M _ Sustainable Design (Part 1)

PROJECT _ SYDNEY REHEARSAL FOLLIES

Final Crit – Week 20

OVERVIEW

ARC2004M runs in parallel to your Technology and Environment 2 component, and is broken down into 2 parts. The tasks undertaken will strengthen your knowledge in the feasibility of conceptual design ideas, broaden your design methodology and develop your awareness of environmental issues relating to building design.

The aims of this module are;

- Develop awareness of sustainable development and environmental design
- Develop awareness of the principles and practice of construction technology
- Improve understanding of materials and detail design
- Focus on energy requirements of domestic and medium size buildings

PART 2 – SYDNEY REHEARSAL FOILLIES

Part 2 of the sustainable design project is a live completion brief run by Archmedium and can be found here http://wordpress.archmedium.com/wp-content/uploads/2016/10/SRF_Brief_en3.pdf and site photos and cad plan are uploaded to blackboard.

You are asked to select a location within the park land adjacent to the Sydney Opera House and design and resolve a rehearsal folly which is to include:

This is to contain:
Tickets office - 25m2
WC - 50m2
Storage - 25m2
Rehearsal room - 100m2
Auditorium - 75m2
Outdoor performance area

Along side developing a design for your folly, over the Christmas break you are expected to research the site conditions, environmental factors and develop and propose strategies for dealing with materials, construction, environmental design passive solar design and accousitic performance of a building.

School of Architecture and Design

University of Lincoln Brayford Pool Lincoln LN6 7TS United Kingdom
www.lincoln.ac.uk 01522 837444 jdale@lincoln.ac.uk

UNIVERSITY OF LINCOLN

SUBMISSION – Week 20

Your final submission will take the form of 2 A1 competition presentation sheets

Sheet 1
Shall communicate your research and strategies on structure, materials, construction, environmental design, and understanding of materials and forms of construction for: Substructure, Superstructure , External envelope, Internal finishes and components, Hard and soft landscaping and associated drainage

Sheet 2
Shall communicate your final building design in its context and demonstrate an understanding of detail design.

Module Learning Outcomes

Over the course of part 1 and part 2 of the project you will address the learning outcomes below;

LO1 Demonstrate an understanding of the principles of sustainable planning and development, of energy efficient design and of passive solar design.

LO2 Demonstrate sustainable strategies for structure, materials, construction, environmental design and detail design in design projects.

LO3 Demonstrate in design projects an understanding of the process of selection and specification of materials and forms of construction for: • Substructure • Superstructure • External envelope • Internal finishes and components • Hard and soft landscaping and associated drainage

LO4 Identify the legislative requirements pertaining to safety in medium size buildings and demonstrate an understanding of the theory of fire technology and means of escape.

LO5 Demonstrate an understanding of servicing requirements of medium size buildings.

LO6 Demonstrate: • Mechanisms of heat transfer under non steady state conditions • Calculation of energy use in a domestic scale building • Analysis of a domestic scale building to establish areas of condensation risk including proposals for remedial measures

LO7 Identify the thermal, visual and acoustic environmental needs of building users and demonstrate an effective design response.

School of Architecture and Design

University of Lincoln Brayford Pool Lincoln LN6 7TS United Kingdom
www.lincoln.ac.uk 01522 837444 jdale@lincoln.ac.uk