UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title	Sustainable Design Studio 2
Module Code	CSE5022-D
Academic Year	2024/5
Credits	40
School	School of Built Environment, Architecture & Creative Industries
FHEQ Level	FHEQ Level 5

Contact Hours	
Type	Hours
Practical Classes or Workshops	24
Independent Study	280
Lectures	48

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Academic Year

Module Aims

Utilizing a sustainable design philosophy encourages decisions at each phase of the design process that will reduce negative impacts on the environment and the health of the occupants, without compromising the bottom line. It is an integrated, holistic approach that encourages compromise and tradeoffs. Such an integrated approach positively impacts all phases of a building's life-cycle, including design, construction, operation and decommissioning.

The module aims to

Provide a forum for the students to develop a creative, inventive and productive design process in relation to a design project or projects.

Raise student awareness and understanding of the occupants and users and their physical, social and psychological needs through the design of both objects and environments at appropriate scales, as well as exploring key characteristics of design projects.

Focus on investigations of site and context that may involve the gathering of empirical data, making analytical studies and conducting observations of people, place, context and materials that are appropriate to the project.

Enable students to develop an understanding of space and materials. It familiarizes students with methods for fabricating models, prototypes, 2D and 3D drawings, sketches, diagrams, collage, photographs and mixed media representations, and to practice their use in generating and communicating ideas.

Focus on the application of knowledge of environmental design principles into students? design projects, using effective environmental strategies and systems as part of the design process.

Outline Syllabus

Human needs and scale in creating spatial designs

Compliance with aesthetic and technical requirements of the project brief

Compliance with UK legislation, appropriate performance standards and health and safety requirements.

Principles of environmental design and responding to the needs of building users in relation to visual, thermal and acoustic comfort and their influence on the design process.

End-users personal, physical and sensory needs and the potential social and environmental impacts of building projects.

Environmental design strategies that relate to the influences of climate, form and orientation.

Methods for fabricating models, prototypes, 2D and 3D drawings, sketches, diagrams, collage, photographs and mixed media representations

Awareness of local and global issues (such as inequalities and sustainability) and potential solutions to address those through project work to create positive social impact on the wider society.

Organizational skills: work to fulfil briefs and deadlines and to take on responsibility for work

Communicate ideas and arguments coherently and effectively in spoken and written words as well as other media.

Problem-solve: have the ability to analyse problems and to propose solutions. Be able to think critically: to reflect upon feedback and to improve performance

Learning Outcomes	
Outcome Number	Description
01	Interpret the relationship between people and their environment and be able to relate design to human needs and scale
02	Create spatial designs that satisfy both aesthetic and technical requirements and comply with UK legislation, appropriate performance standards and health and safety requirements.
03	Examine how the constraints of the existing built environment, site, and environmental context influence the design resolution.
04	Discuss the principles of environmental design by identifying the needs of building users in relation to visual, thermal and acoustic comfort and their influence on the design process.
05	Engage in responsible design with an awareness of the end-users? personal, physical and sensory needs and the potential social and environmental impacts of building projects.
06	Propose an environmental design strategy that responds to the influences of climate, form and orientation.
07	Communicate ideas and arguments coherently and effectively in spoken and written words as well as other media in a portfolio which is edited, organised and clearly labelled so that it can be evaluated in terms of range, depth, creativity and originality as well as standards of accuracy and skills of execution.

Learning, Teaching and Assessment Strategy

The teaching and learning methods have been selected to engage students in developing their knowledge and understanding of advanced Sustainable Design through formal learning opportunities such as lectures and tutorials, experiential learning through practical classesand informal and social learning through team-working in projects.

Throughout the module, students will be set formative assessment activities that will help develop confidence in tackling advanced sustainable design and in the use of the skills, tools and techniques that will support them. The timely constructive feedback from this formative assessment will support students develop the skills and knowledge required for the summative assessment.

This module focuses on two important aspects of learning, on the one hand the integration of more advanced environmental strategies in design and relevant principles and tools, on the other, experiencing how these tools and techniques are enacted in building design. The learning and teaching is organised around a series of lectures introducing more advanced principles of environmental design, visual, thermal and acoustic comfort and their influence on the design process. The lectures are supplemented by practical workshops and design tutorials that engage the students through active learning and problem solving.

The module will be summatively assessed through a design portfolio and presentations. Design work is developed in the studio environment as per the programme briefs, through workshops, group and individual tutorials, to continually appraise, evaluate and develop the work. All design work is regularly presented to academics and peers for critical feedback.

Portfolio Mid-Year Review: mid-way through the year, an individual portfolio review is held with the Level 5 tutors and formative written feedback is provided on the progress towards the final, comprehensive design portfolio.

If a student requires supplementary assessment for re-assessment, the assessment methods will be the same as original.

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Coursework - Written	Design Portfolio (Mid-Year Review) including presentation (eqivalent to 1500 words)	40%
Summative	Coursework - Written	Design Portfolio (Final) incuding presentation (equivalent to 2500 words)	60%

Reading List
To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:
This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

---

https://bradford.ac.uk