09 School of Architecture

AR541		Collective Dwelling				
Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Spring	I	30 (15)	100% Coursework with Compulsory Numeric Elements	Bothwell Mr K

Contact Hours

120 contact hours

Learning Outcomes

- An ability to develop a conceptual and critical approach to architectural design that integrates and satisfies the aesthetic aspects of a building and the technical requirements of its construction and the needs of the user

- A knowledge of the application of appropriate theoretical concepts to studio design projects, demonstrating a reflective and critical approach

- An awareness of the theories of urban design, the planning of communities and the influence of the design and development of cities, past and present on the contemporary built environment

- An understanding of the impact of buildings on the environment, and the precepts of sustainable design

- An understanding of the way in which buildings fit into their local context and the ability to plan a group of buildings to create a series of appropriately scaled external spaces

- An understanding of the potential impact of building projects on existing and proposed communities

- An understanding of the investigation, critical appraisal and selection of alternative structural, constructional and material systems relevant to architectural design

- A knowledge of principles associated with designing optimum visual, thermal and acoustic environments

- A knowledge of systems for environmental comfort realised within relevant precepts of sustainable design

- An ability to apply a range of communication methods and media to present proposals clearly and effectively.

- An ability to work as part of a team

Method of Assessment

Design Project 100%

Preliminary Reading

Alexander, C. (1978) A pattern language (Oxford: Oxford University Press)
Cullen, G. (1961, 1996) A concise townscape (London: Architectural Press)
Davies, C. (2005) The Prefabricated Home (London: Reaktion)
Hertzberger, H., 2001. Lessons for students in architecture. (Rotterdam: 010 Publishers)
Larice, M., and Macdonald, E. (2013) The urban design reader (2nd ed). (Abingdon: Routledge)
Sherwood, Roger (1981) Modern Housing Prototypes. (Cambridge MA: Harvard University Press)

Pre-requisites

None

Restrictions

BA (Hons) Architecture students only

Synopsis *

This module introduces students to urban design, focussing on housing as a building type. It takes place in two stages, the first being to plan a group of buildings, possibly in an urban context, and the second to develop the design of one of the individual housing blocks comprising multiple units. Students will examine the various typologies of collective dwellings and investigate alternative ways in which these can be combined to form urban blocks. In preparation for this module students will explore some of the principles and theories of urban design and apply some of these in their projects . The principles of sustainability will be examined in the context of energy and environmental assessment methods, and the use of appropriate construction techniques will be explored. Students will develop both digital and hand-drawn presentation and communication techniques,

AR542 Climate

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Autumn	I	15 (7.5)	100% Coursework with Compulsory Numeric Elements	Watkins Dr R

Contact Hours

25 contact hours

Learning Outcomes

- A reasonable knowledge of the need to critically review precedents relevant to the function, organisation and technological strategy of design proposals
- A reasonable knowledge of the investigation, critical appraisal and selection of alternative structural, constructional and material systems relevant to architectural design
- A reasonable knowledge of strategies for building construction, and ability to integrate knowledge of structural principles and construction techniques
- A critical knowledge of the physical properties and characteristics of building materials, components and systems, and the environmental impact of specification choices
- A reasonable knowledge of the principals associated with designing optimum visual, thermal and acoustic environments
- A reasonable knowledge of the systems for environmental comfort realised within relevant precepts of sustainable design
- A reasonable knowledge of the strategies for building services, and ability to integrate these in a design project
- The necessary skills to prepare analytical and detailed technical drawings accurately illustrating environmental design solutions
- An ability to apply the principles of evidence-based design to the evaluation of environmental design strategies
- An ability to generate design proposals using understanding of a body of knowledge, some at the current boundaries of professional practice and the academic discipline of architecture
- An ability to understand the alternative materials, processes and techniques that apply to architectural design and construction
- Research and analytical skills
- Ability to produce reports which are clear, analytical and logical covering a range of technical issues and include appropriate illustrations
- An ability to critically evaluate your own ideas in the context of learning
- An awareness of the role of research in overcoming knowledge gaps

Method of Assessment

100% coursework
Environmental Strategies Report (100%)

Preliminary Reading

Givoni, B. (1981) Man, climate and architecture. (Hoboken NJ: John Wiley)
Littlefair, P. (2011) Site layout planning for daylight and sunlight: a guide to good practice. Watford: BRE.
Oke, T. R. (1987) Boundary Layer Climates. London; New York: Routledge.
Szokolay, S. V. (2004, 2005). Introduction to architectural science: the basis of sustainable design. Oxford: Architectural Press.
Thomas, R. (2006). Environmental design: an introduction for architects and engineers (3rd Ed.). London: Taylor and Francis.

Pre-requisites

Co-requisite: Architecture and Landscape module

Restrictions

BA (Hons) Architecture students only

Synopsis *

Students will explore passive means of environmental control to achieve comfort in different climates. Vernacular precedents of passive design will be examined and distinguished from the cultural influences on design in different cultures. The concept of exterior and interior climates will be critically investigated and students will develop a good understanding of the microclimate created by cities, landscapes, groups of building and individual structures. The influence of materials, form and construction on environmental performance will be examined with reference to precedents and benchmarks. Specific techniques and methodologies for climate analysis and environmental design will be learned and applied.

The assignment concerns the development of environmental design strategies that are to be integrated appropriately into the design work of the concurrent module Architecture and Landscape. Students will demonstrate how they have provided for fresh air to move through the main building of Architecture and Landscape, as well as how they have exploited passive resources for cooling, temperature control, solar gain and the control of solar gain, both in the summer and winter and for the daytime and night-time. The integration of these into the main building of Architecture and Landscape will take heed of the functions of the spaces and their disposition and be arranged for good efficacy. Students will concisely describe the rationale of the environmental strategies and explain the operation of any technology used in realizing these strategies and illustrate this with appropriate plans and cross-sections.

AR543 Urban

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Spring	H	45 (22.5)	100% Project with Compulsory Numeric Elements	

Contact Hours

76 contact hours

Learning Outcomes

- An ability to prepare and present building design projects of diverse scale, complexity and type in a variety of contexts, using a range of media, and in response to a brief
- An ability to understand the constructional and structural systems, the environmental strategies and the regulatory requirements that apply to the design and construction of a comprehensive design project
- An ability to develop a conceptual and critical approach to architectural design that integrates and satisfies the aesthetic aspects of a building and the technical requirements of its construction and the needs of the user
- Adequate knowledge of the application of appropriate theoretical concepts to studio design projects, demonstrating a reflective and critical approach
- Knowledge of how the theories, practices and technologies of the arts influence architectural design
- Knowledge of the creative application of such work to studio design projects, in terms of their conceptualization and representation
- Knowledge of theories of urban design and the planning of communities
- Knowledge of the influence of the design and development of cities, past and present on the contemporary built environment
- Knowledge of current planning policy and development control legislation, including social, environmental and economic aspects, and the relevance of these to design development
- Understanding of the impact of buildings on the environment, and the precepts of sustainable design
- Understanding of the way in which buildings fit into their local context
- Understanding of the nature of professionalism and the duties and responsibilities of architects to clients, building users, constructors, co-professionals and the wider society
- An understanding of the investigation, critical appraisal and selection of alternative structural, constructional and material systems relevant to architectural design
- An understanding of strategies for building construction, and ability to integrate knowledge of structural principles and construction techniques
- An understanding of the physical properties and characteristics of building materials, components and systems, and the environmental impact of specification choices
- Knowledge of the principles associated with designing optimum visual, thermal and acoustic environments
- Knowledge of systems for environmental comfort realised within relevant precepts of sustainable design
- Knowledge of strategies for building services, and ability to integrate these in a design project
- The skills to critically examine the financial factors implied in varying building types, constructional systems, and specification choices, and the impact of these on architectural design
- The skills to understand the cost control mechanisms which operate during the development of a project
- The skills to prepare designs that will meet building users' requirements and comply with UK legislation, appropriate performance standards and health and safety requirements
- Knowledge of the fundamental legal, professional and statutory responsibilities of the architect, and the organizations, regulations and procedures involved in the negotiation and approval of architectural designs, including land law, development control, building regulations and health and safety legislation
- Knowledge of the professional inter-relationships of individuals and organizations involved in procuring and delivering architectural projects, and how these are defined through contractual and organizational structures
- Knowledge of the basic management theories and business principles related to running both an architect's practice and architectural projects, recognizing current and emerging trends in the construction industry
- The ability to generate design proposals using understanding of a body of knowledge, some at the current boundaries of professional practice and the academic discipline of architecture
- The ability to apply a range of communication methods and media to present design proposals clearly and effectively
- An understanding of the alternative materials, processes and techniques that apply to architectural design and building construction
- Knowledge of the context of the architect and the construction industry, and the professional qualities needed for decision making in complex and unpredictable circumstances
- The ability to identify individual learning needs and understand the personal responsibility required for further professional education

Method of Assessment

Design 70% (Report & Project)
Environment & Technology 15% (Report & Project)

Professional Practice 15% (Report)

Preliminary Reading

Design

Adria, Miquel, et al. 2005 10x10 2: 100 Architects, 010 Critics. London: Phaidon.
Bloomer, Kent C., Moore, Charles Willard, Yudell, Robert J. 1978. Body, Memory and Architecture. New Haven and London: Yale University Press.
Hall, Peter. 1998. Cities in Civilisation. London: Weidenfeld and Nicholson.
Ibelings, Hans. (2002). Supermodernism. Rotterdam: Nai.
Rowe, Colin and Koetter, Fred. (1978). Collage City. Cambridge, Mass: MIT.
Sennett, Richard. (2003). Flesh and Stone: The Body and the City in Western Civilization. Harmondsworth: Penguin.
Weston, Richard. (2003). Materials Form and Architecture. London: Laurence King.
Zumthor, Peter. (1998). Architektur Denken. Baden, CH: Lars Müller.

Technology and Environment

Bentley, Ian, Alcock, Alan and Murrain, Paul and McGlynn, Sue and Smith, Graham. (1985). Responsive environments: a manual for designers. Architectural Press.
Bizley, Graham. (2007). Architecture in detail. Architectural Press.
Borer, Pat and Harris, Cindy. (1998, 2008). The whole house book (3rd edition). Machynlleth: The Centre for Alternative Technology (CAT).
BRECSU Building a sustainable future: homes for an autonomous community. (1998). General Information Report 53. BRECSU (GIR53)
Broome, Jon. (2007). The green self-build book: how to design and build your own eco-home. Green Books
Brown, Lance J and Dixon, David and Oliver, Gillham. (2009). Urban design for an urban century: placemaking for people. John Wiley.
Chambers, Nicky and Simmons, Craig and Wackernagel, Mathis. (2000). Sharing nature's interest: ecological footprints as an indicator of sustainability. London: Earthscan.
Department for Communities and Local Government. (2006). Code for sustainable homes: a step-change in sustainable home building practice. London: Department for Communities and Local Government.
Department for Communities and Local Government. 2007. Code for sustainable homes: technical guide. London: Department for Communities and Local Government. Available only as an on-line document at: http://www.planningportal.gov.uk/uploads/code_for_sustainable_homes_techguide.pdf
Hawkes, Dean. (2007). The environmental imagination. Routledge/Taylor and Francis.
Horden, Richard. (2008). Microarchitecture. London. Thames and Hudson.
Hyde, Richard. (2007). Bioclimatic housing. Earthscan.
Lechner, Norbert. (2008). Heating, Cooling & Lighting – Sustainable Design Methods for Architects (3rd ed). Wiley.
McLeod, Virginia. (2007). Detail in contemporary residential architecture. London: Laurence King

Practice

Chapell, D. (2003). Understanding JCT standard building Contracts. Spon: London.
Green, R. (2001). The Architect’s Guide to Running a Job. Architectural Press: London.
Harper, R. (1997) A Student’s Guide to the First Year in an Architect’s Office. RIBA: London.
Soulsby. (1989). Business Law. McGraw.
Speaight, A. (2004). The Architect’s Legal Handbook. Architectural Press: London.

Pre-requisites

None

Restrictions

BA Architecture students only

Synopsis *

This module, the final one of the programme, engages students in the design of a building in an urban centre. In lectures and seminars, it deals with distinctive urban plans in the contemporary world, as well as a consideration of their historical provenance. The design exercise seeks to locate a complex building type, of mixed social use, within a developed urban fabric. The module assesses a student's capabilities, skills, knowledge and understanding that are brought to bear on such a design. The key design skill to be demonstrated is the integration of the conflicting demands surrounding a proposal that successfully balances the requirements of client, user and the public with the cultural, technical and environmental pressures encountered. As the final statement of student competence, the design will be expected to successfully demonstrate critical and reflective awareness of process across a wide range of indicators, including awareness of fine art theories and methods of production as applied to building. The outputs required will comprise a fully designed building proposal, with an accompanying report. The report component will comprise design studies and a technical analysis of the building and its systems, responding to a targeted lecture series. They will also produce a building assessment from the perspective of a professional practice, management & law lecture series, and generate appraisals of the building as though it were a live project, in terms of appointment, procurement, planning permission, statutory permissions and cost.

AR544 Renaissance to Neoclassicism

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Autumn	I	15 (7.5)	100% Coursework with Compulsory Numeric Elements	Guerci Dr M

Contact Hours

20 contact hours

Learning Outcomes

A. A knowledge of the cultural, social and intellectual histories, theories and technologies that influence the design of buildings
B. A knowledge of the influence of history and theory on the spatial, social, and technological aspects of architecture
C. A knowledge of how theories, practices and technologies of the arts influence architectural design
D. A knowledge of the creative application of the fine arts and their relevance and impact on architecture
E. A understanding of the need to critically review precedents relevant to the function, organisation and technological strategy of design proposals
F. An awareness of concepts of historical change
G. An awareness of the Western tradition of design
H. A knowledge of the historical development of European architecture, and of its relationship to the English mainstream
I. Knowledge of key buildings from Western architectural history

Method of Assessment

Illustrated 2,500 word essay (100%)

Preliminary Reading

Blunt, A. (1982) Guide to Baroque Rome, London: Harper and Row
Bergdoll, B. (2000) European Architecture 1750-1890, Oxford: Oxford University Press.
Boullée, Étienne-Louis, (1793) Architecture, An Essay on Art, Bibliothéque Nationale, Paris edited and annotated by Helen Rosenau, translated by Sheila de Vallée.
Hale J.R., Renaissance Europe 1480-1520. (2000) Oxford and Malden, Mass.: Blackwell Publishers
Kaufmann, E. (1955) Architecture in the Age of Reason: Baroque and Post-Baroque in England, Italy, and France. Cambridge MA: Harvard University Press.
Kruft, H.W. (1994) A History of Architectural Theory from Vitruvius to the Present, New York: Zwemmer and Princeton Architectural Press, pp128-271.
Laugier, M.A. (1977 / 1753) An Essay on Architecture, trans/ by W and A Herrmann, Los Angeles: Hennessey and Ingalls Inc.
Lemerle F. & Pauwels, Y., (2008) Baroque Architecture 1600-1750, Paris: Flammarion
Millon, H. (1999) The Triumph of the Baroque: Architecture in Europe 1600-1750, New York: Rizzoli
Panofsky, E. (1960) Renaissance and Renascences in Western Art, New York: Harper and Row
Rykwert, J. (1983) The First Moderns: The Architects of the Eighteenth Century, London and Cambridge MA: MIT Press.
Summerson, J. (1977) Architecture in Britain 1530–1830, Pelican
Vidler, A. (1989) The Writing of the Walls: Architectural Theory in the Late Enlightenment, Princeton" Princeton University Press.
Watkin, D. (2005) A History of Western Architecture. London: Laurence King.
Wittkower, R. Architectural Principles in the Age of Humanism (3d ed. 1962, repr. 1965)
Blunt, A. (1982) Guide to Baroque Rome, London: Harper and Row

Bergdoll, B. (2000) European Architecture 1750-1890, Oxford: Oxford University Press
Boullée, Étienne-Louis, (1793) Architecture, An Essay on Art, Bibliothéque Nationale, Paris, edited and annotated by Helen Rosenau, translated by Sheila de Vallée.
Hale J.R., Renaissance Europe 1480-1520. (2000) Oxford and Malden, Mass.: Blackwell Publishers

Kaufmann, E. (1955) Architecture in the Age of Reason: Baroque and Post-Baroque in England, Italy, and France. Cambridge MA: Harvard University Press.

Kruft, H.W. (1994) A History of Architectural Theory from Vitruvius to the Present, New York: Zwemmer and Princeton Architectural Press, pp128-271.
Laugier, M.A. (1977 / 1753) An Essay on Architecture, trans/ by W and A Herrmann, Los Angeles: Hennessey and Ingalls Inc.

Lemerle F. & Pauwels, Y., (2008) Baroque Architecture 1600-1750, Paris: Flammarion
Millon, H. (1999) The Triumph of the Baroque: Architecture in Europe 1600-1750, New York: Rizzoli
Panofsky, E. (1960) Renaissance and Renascences in Western Art, New York: Harper and Row
Rykwert, J. (1983) The First Moderns: The Architects of the Eighteenth Century, London and Cambridge MA: MIT Press
Summerson, J. (1977) Architecture in Britain 1530–1830, Pelican
Vidler, A. (1989) The Writing of the Walls: Architectural Theory in the Late Enlightenment, Princeton" Princeton University Press.

Watkin, D. (2005) A History of Western Architecture. London: Laurence King.
Wittkower, R. Architectural Principles in the Age of Humanism (3d ed. 1962, repr. 1965)

Pre-requisites

None

Restrictions

BA Architecture students only

Synopsis *

This module addresses the developments in architecture from the early fifteenth century to the beginning of the nineteenth century. The cultural context of the time will be studied by outlining the socio-economic conditions, the new attitudes to knowledge, arts, history and architecture. Architectural treatises of the early Renaissance and the related developments in the practices of painting and sculpture will be brought into the consideration in order to highlight specific innovation and dynamics of architecture. The underlying conditions of the movements known as Renaissance, Mannerism, Baroque, Rococo and Neo-classicism will be addressed and relevant buildings, objects of art, architectural texts and dominant narratives will be studied. Landscape design will be discussed through the comparative analysis between the formal landscape design and the phenomenon of the picturesque. The architecture of symbolism and utopianism is also considered. The eighteenth-century organization of life and labour, the emerging spaces of production, as well as the establishment of the academies, museums, and other institutions will be addressed, in order to highlight the way in which these phenomena contributed to the rise of the architectural profession and the building guilds. Typical forms of historic building technologies will be discussed, together with their relevance to current technologies.

AR545 Adapt and Extend

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Autumn	H	30 (15)	100% Coursework with Compulsory Numeric Elements	

Contact Hours

150 contact hours

Learning Outcomes

- An ability to prepare and present building design projects of diverse scale, complexity, and type in a variety of contexts, using a range of media, and in response to a brief
- An ability to develop a conceptual and critical approach to architectural design that integrates and satisfies the aesthetic aspects of a building and the technical requirements of its construction and the needs of the use
- A knowledge of the creative application of such work to studio design projects, in terms of their conceptualisation and representation
- An understanding of the needs and aspirations of building users
- An understanding of the investigation, critical appraisal and selection of alternative structural, constructional and material systems relevant to architectural design
- An understanding of strategies for building construction, and ability to integrate knowledge of structural principles and construction techniques
- An understanding of the physical properties and characteristics of building materials, components and systems, and the environmental impact of specification choices
- A knowledge of principles associated with designing optimum visual, thermal and acoustic environments
- A knowledge of systems for environmental comfort realised within relevant precepts of sustainable design
- A knowledge of strategies for building services, and ability to integrate these in a design project
- Skills to prepare designs that will meet building users' requirements and comply with UK legislation, appropriate performance standards and health and safety requirements
- An understanding of the need to appraise and prepare building briefs of diverse scales and types, to define client and user requirements and their appropriateness to site and context
- An understanding of the contributions of architects and co-professionals to the formulation of the brief, and the methods of investigation used in its preparation
- An understanding of the need to critically review precedents relevant to the function, organisation and technological strategy of design proposals
- An ability to generate design proposals using understanding of a body of knowledge, some at the current boundaries of professional practice and the academic discipline of architecture
- An ability to apply a range of communication methods and media to present design proposals clearly and effectively
- An understanding of the alternative materials, processes and techniques that apply to architectural design and building construction
- An ability to evaluate evidence, arguments and assumptions in order to make and present sound judgments within a structured discourse relating to architectural culture, theory and design

Method of Assessment

Component A: Design Project: Design (80%)
Component B: Design Project: Technology & Environment (20%)

Preliminary Reading

Banham, Reyner. (1969) The Architecture of the Well-Tempered Environment. Chicago: University of Chicago Press.
Blundell-Jones, P. (2002). Modern architecture through case studies. Oxford: Architectural Press.
Cantacuzino, S. (1989). Re-architecture: Old buildings/new uses. London: Thames and Hudson.
Cramer, J., & Breitlin, S. (2007). Architecture in existing fabric: Planning, design, building. Basel: Birkhauser
Deplazes, A. (2002). Constructing architecture: Materials, processes, structures: a handbook.
Hawkes, Dean. (1996). The Environmental Tradition: studies in the architecture of environment. London: Taylor & Francis.
Herzog, T., Krippner, R., & Lang, W. (2004). Facade construction manual. Basel: Birkhauser.
Kind-Barkaukas, F. (2002). Concrete Construction manual.
Porteous, Colin. (2002). The new eco-architecture: alternatives from the modern movement. London: Spon Press
Schittich, Christian. (2003) In detail: Building in Existing Fabric. Berlin: Birkhauser.
Schulitz, H.C., Sobek, W., & Habermann, K.J. (2003). Steel Construction Manual. Birkhauser.
Thomas, Randall; Garnham, Trevor. (2007). The environments of architecture: environmental design in context. Abingdon: Taylor and Francis.

Pre-requisites

None

Restrictions

BA Architecture students only

Synopsis *

The adaptation and extension of existing buildings for new uses is a staple of design practice, ranging from the unobtrusive to the complete visual overhaul and updating of an existing building. The course will combine architectural design with technological and environmental solutions, on the basis of the adaptation of an existing built envelope with extensions to provide a new use. The practical design project is informed by lectures, seminars and tutorials dealing with the technical, environmental, ergonomic, regulatory, historical, theoretical and aesthetic considerations of architectural adaptation. Topics covered in the Technology & Environment curriculum include: technology transfer, dimensional coordination, movement and expansion, sustainable design for existing buildings, artificial and natural light, learning from building failures, properties of materials, forming openings in existing structures, acoustic design, integration of structure and construction, design for fire safety, structural systems (and rules of thumb) and external and internal elements of construction.

AR548 Modernisms

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Autumn	H	15 (7.5)	100% Project with Compulsory Numeric Elements	

Contact Hours

18 contact hours

Learning Outcomes

- A knowledge of the cultural, social and intellectual histories, theories and technologies that influence the design of buildings
- A knowledge of the influence of history and theory on the spatial, social, and technological aspects of architecture
- The application of appropriate theoretical concepts to studio design projects, demonstrating a reflective and critical approach
- A knowledge of how theories, practices and technologies of the arts influence architectural design
- knowledge of the creative application of the fine arts and their relevance and impact on architecture
- An awareness of cultural theories and their relevance to modern design
- A knowledge of the theoretical underpinnings of key modernist designers
- An ability to relate the concepts underlying one's own design to themes in contemporary theory
- An ability to evaluate evidence, arguments and assumptions in order to make and present sound judgments within a structured discourse relating to architectural culture, theory and design
- An ability to research historical and theoretical topics

Method of Assessment

Cultural context and design essay 3,000 words (100%)

Preliminary Reading

Borden, I. and Ruedi, K. (2006) The Dissertation: An architectural student's handbook (second edition) (Oxford and Burlington MA:)
Colquhoun, A. (2002) Modern Architecture. (Oxford: Oxford University Press)

Curtis, W. J. R. (1987) Modern Architecture since 1900. (London. Phaidon)

Forty, A. (2000) Words and Buildings. (London: Thames & Hudson)

Frampton, K. (2007) Modern Architecture: a critical history (London. Thames & Hudson)

Mallgrave, H. F. and Goodman, D. (2011) An Introduction to Architectural Theory: 1968 to the present (Chichester. Wiley-Blackwell)

Pre-requisites

Concurrently or previously taught design module, on which the module/assessment is based (AR545 Adapt & Extend)

Restrictions

BA Architecture students only

Synopsis *

This module examines cultural theory, and demonstrates its applicability to the disciplines of design. The unit's motto might be see critically. This reverses the design studio ethos where you are urged to think visually. The module focuses on histories and theories of modernism, and brings the discourse of modernity up to date with a survey of post-modernism and post-structuralism. The assessed component comprises a design essay which relates the student’s concurrent design project to the main themes of the module.

AR549 Forms and Structure

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Spring	I	15 (7.5)	100% Coursework with Compulsory Numeric Elements	Cardellicchio L

Contact Hours

30 contact hours

Learning Outcomes

- A reasonable understanding of the need to critically review precedents relevant to the function, organisation and technological strategy of design proposals

- A reasonably developed understanding of the investigation, critical appraisal and selection of alternative structural, constructional and material systems relevant to architectural design
- A reasonably developed understanding of the strategies for building construction, and ability to integrate knowledge of structural principles and construction techniques
- A reasonably developed understanding of the physical properties and characteristics of building materials, components and systems, and the environmental impact of specification choices
- An awareness of the aesthetic possibilities of natural light
- A basic knowledge of iterative and evidence-based approaches to design
- An ability to apply a reasonably developed range of communication methods and media to present design proposals clearly and effectively
- An ability to evaluate evidence, arguments and assumptions at a reasonably developed level in order to make and present sound judgments within a structured discourse relating to architectural culture, theory and design
- A reasonably developed understanding of the alternative material processes and techniques that apply to architectural design and building construction.
- An ability to work in teams
- Research skills and analytical skills
- An ability to produce reports which are clear, analytical and logical covering a range of technical issues and include appropriate illustrations
- An awareness of the role of research in overcoming knowledge gaps

Method of Assessment

Structural Case Study (Technology 40%)
Design project (Design 60%)

Preliminary Reading

Gordon, J. E. 1. (1978). Structures, or Why things don't fall down. (London: Penguin)

Ram S. Guta, (2010).Principles of Structural Design: Wood, Steel, and Concrete (London: Taylor & Francis)

Silver, Pete and McLean, Will (2008) Introduction to Architectural Technology (London: Laurence King)

Williams, A., (2009) Structural Analysis - In Theory and Practice (Oxford: Butterworth-Heinemann)

Pre-requisites

None

Restrictions

BA Architecture students only

Synopsis *

This design module integrates concerns for structure, construction and form in the process of architectural design. The objective is to help and to encourage students to design with each of these subject areas simultaneously informing the others.

A series of lectures and seminar group exercises will introduce students to the principles of structural design including structural typologies; loads and forces; simple beam bending theory; mechanics of materials; and structural geometry. Students will be presented with strategies and qualitative methods of structural analysis which will support the activities of the module. Basic structural theory and the study of form and construction will be consistently related to real buildings, structures and materials.

Students will undertake a Structural Case Study of an existing work of architecture. They will be required to identify the structural materials and systems adopted, and will present a critique of the contribution made by the structure to the architecture. (Component A). Component A will conclude with a presentation by the students of their Structural Case Studies and the submission of a brief written report.

The module will conclude with a design exercise in which the focus will be the design and resolution of an appropriate structural system, (Component B). Component B will conclude with a presentation of a structural system to include a model which clearly explains the structural strategy, drawings of the general arrangement of structural components including sized elements alongside a structural design report.

AR551 Nineteenth-Century Architecture

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Spring	I	15 (7.5)	100% Exam	Brittain-Catlin Mr TJ

Contact Hours

19 contact hours

Learning Outcomes

- A developed knowledge of the cultural, social and intellectual histories, theories and technologies that influence the design of buildings

- A developed knowledge of the influence of history and theory on the spatial, social, and technological aspects of architecture

- A knowledge of how theories, practices and technologies of the arts influence architectural design

- A knowledge of the creative application of the fine arts and their relevance and impact on architecture

- An understanding of the need to critically review precedents relevant to the function, organisation and technological strategy of design proposals

- A detailed understanding of some significant historical episodes in architectural history and an ability to draw from these episodes an understanding of abstract architectural principles

- An understanding of the role of buildings and interiors outside architectural history, for example in social and economic history

- An ability to apply a range of communication methods and media to present design proposals clearly and effectively

- An ability to evaluate evidence, arguments and assumptions at a reasonably developed level in order to make and present sound judgments within a structured discourse relating to architectural culture, theory and design

- An ability to write clearly, using academic conventions and appropriate illustrations in a well-designed format

Method of Assessment

Three hour written (unseen) examination (100%)

Preliminary Reading

Banham, Reyner. 1967. Theory and design in the first machine age. London: Architectural Press
Bergdoll, Barry. 2000. European architecture 1750-1890. Oxford: Oxford University Press.
Davey, Peter. 1995. Arts and crafts architecture. London: Phaidon.
Pevsner, Nikolaus. 1960. Pioneers of modern design. Harmondsworth: Penguin.

Pre-requisites

None

Restrictions

BA Architecture students only

Synopsis *

This course will enable the student to learn through a series of detailed thematic and historical investigations how a number of specific important aspects and events in architectural history have changed the way in which we experience the built environment and, also, to appreciate the responsibility of all architects and designers towards the societies in which they live. Its focus is the nineteenth century. Students will be assessed in the form of an examination which will draw on material researched through guided casework study. Typical forms of historic building technologies will be discussed, together with their relevance to current technologies.

AR552 Architecture and Landscape

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Autumn	I	30 (15)	100% Coursework with Compulsory Numeric Elements	Hobbs Miss R

Contact Hours

63 contact hours

Learning Outcomes

- The ability to prepare and present building design projects of diverse scale, complexity, and type in a variety of contexts, using a range of media, and in response to a brief

- The knowledge of the application of appropriate theoretical concepts to studio design projects, demonstrating a reflective and critical approach

- The creative application of knowledge of the fine arts to studio design projects, in terms of their conceptualisation and representation

- An understanding of the impact of buildings on the environment, and the precepts of sustainable design

- An understanding of the way in which buildings fit into their local context

- An understanding of the need to appraise and prepare building briefs of diverse scales and types, to define client and user requirements and their appropriateness to site and context

- An understanding of the contributions of architects and co-professionals to the formulation of the brief, and the methods of investigation used in its preparation

- An understanding of the western and selected non-western traditions of landscape design

- An ability to design buildings and landscapes which are plausible technically and environmentally

- An ability to produce 2D and 3D computer drawings

- An ability to produce high quality rendered images

- An ability to generate design proposals using understanding of a body of knowledge, some at the current boundaries of professional practice and the academic discipline of architecture

- An ability to apply a reasonably developed range of communication methods and media to present design proposals clearly and effectively
- An understanding of the alternative materials, processes and techniques that apply to architectural design and building construction
- An ability to evaluate evidence, arguments and assumptions at a reasonably developed level in order to make and present sound judgments within a structured discourse relating to architectural culture, theory and design
- An ability to solve complex problems and to communicate their resolution clearly.
- An ability to be self-critical and an understanding of one's strengths and weaknesses
- Ability to use images as a communication tool

Method of Assessment

Design Project: 100% (includes of evidence of learning from cultural context lectures on landscape as part of this course)

Preliminary Reading

Amoroso, Nadia. Representing landscapes: a visual collection of landscape architectural drawings. Routledge, 2012
Dee, Catherine. Form and fabric in landscape architecture: a visual introduction. London: Spon, 2001.
Haney, David H. When modern was green: life and work of landscape architect Leberecht Migge. Routledge, 2010.
McHarg, Ian L. Design with nature. New York: Wiley, 1992.
Moore, Charles Willard, Mitchell, William J., Turnbull, William. The poetics of gardens. Cambridge MA: MIT Press, 1993.
Turner, Tom. Garden history: philosophy and design, 2000 BC--2000 AD. London: Spon, 2005

Pre-requisites

Co-requisites: Renaissance to Neo-Classicism (AR544) and Climate (AR542)

Restrictions

BA Architecture students only

Synopsis *

This course focuses upon the relationship of landscape and architectural, particularly through the siting of a building, site planning, and elementary planting design and landscape detailing. The design project is treated as a totality, with architecture and landscape fully integrated both spatially and conceptually. The building brief is of moderate complexity, following sustainable principles relating to the Climate module. The history and theory of landscape architecture is covered in a series of accompanying lectures. Lectures and workshops with landscape architects and others introduce students to the contemporary profession of landscape architecture, techniques of landscape representation, and to the dynamics of professional team work with related disciplines. Computer drawing, 2D and 3D, is also taught in this module, and students present aspects of their design scheme using these methods.

AR553 BA(Hons) Architecture Term Abroad

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Autumn	I	60 (30)	Pass/Fail Only	Bothwell Mr K
1	Canterbury	Spring	I	60 (30)	Pass/Fail Only	Bothwell Mr K

AR554 Urban

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Spring	H	30 (15)	100% Coursework	
1	Canterbury	Spring	H	30 (15)	100% Project	

Contact Hours

59 hours

Learning Outcomes

Specific Learning Outcomes:
- An ability to prepare and present building design projects of diverse scale, complexity and type in a variety of contexts, using a range of media, and in response to a brief.
- An ability to understand the constructional and structural systems, the environmental strategies and the regulatory requirements that apply to the design and construction of a comprehensive design project.
- An ability to develop a conceptual and critical approach to architectural design that integrates and satisfies the aesthetic aspects of a building and the technical requirements of its construction and the needs of the user.
- Adequate knowledge of the application of appropriate theoretical concepts to studio design projects, demonstrating a reflective and critical approach.
- Knowledge of the creative application of such work to studio design projects, in terms of their conceptualization and representation.
- Knowledge of theories of urban design and the planning of communities.
- Knowledge of the influence of the design and development of cities, past and present on the contemporary built environment.
- An understanding of the impact of buildings on the environment, and the precepts of sustainable design.
- An understanding of the way in which buildings fit into their local context.
- An understanding of the investigation, critical appraisal and selection of alternative structural, constructional and material systems relevant to architectural design.
- An understanding of strategies for building construction, and ability to integrate knowledge of structural principles and construction techniques.
- An understanding of the physical properties and characteristics of building materials, components and systems, and the environmental impact of specification choices.
- Knowledge of the principles associated with designing optimum visual, thermal and acoustic environments.
- Knowledge of systems for environmental comfort realised within relevant precepts of sustainable design.
- Knowledge of strategies for building services, and ability to integrate these in a design project.
- The skills to prepare designs that will meet building users' requirements and comply with UK legislation, appropriate performance standards and health and safety requirements.

Generic Learning Outcomes:

- The ability to apply a range of communication methods and media to present design
- The ability to identify individual learning needs and understand the personal responsibility required for further professional education

Method of Assessment

100% coursework
The completed project (Design: 80%; Technology & Environment: 20%) is a document submitted online.

Preliminary Reading

Adria, Miquel, et al. 2005 10x10 2: 100 Architects, 010 Critics. London: Phaidon.
Bentley, Ian, Alcock, Alan and Murrain, Paul and McGlynn, Sue and Smith, Graham. (1985). Responsive environments: a manual for designers. Architectural Press.
Bizley, Graham. (2007). Architecture in detail. Architectural Press.
Bloomer, Kent C., Moore, Charles Willard, Yudell, Robert J. 1978. Body, Memory and Architecture. New Haven and London: Yale University Press.
Brown, Lance J and Dixon, David and Oliver, Gillham. (2009). Urban design for an urban century: placemaking for people. John Wiley.
Hall, Peter. (1998). Cities in Civilisation. London: Weidenfeld and Nicholson.
Hawkes, Dean. (2007). The environmental imagination. Routledge/Taylor and Francis.
Ibelings, Hans. (2002). Supermodernism. Rotterdam: Nai.
Lechner, Norbert. (2008). Heating, Cooling & Lighting – Sustainable Design Methods for Architects (3rd ed). Wiley.
Rowe, Colin and Koetter, Fred. (1978). Collage City. Cambridge, Mass: MIT.
Sennett, Richard. (2003). Flesh and Stone: The Body and the City in Western Civilization. Harmondsworth: Penguin.
Weston, Richard. (2003). Materials Form and Architecture. London: Laurence King.
Zumthor, Peter. (1998). Architektur Denken. Baden, CH: Lars Müller.

Pre-requisites

None

Restrictions

BA Architecture students only

Synopsis *

This module, the final one of the programme, engages students in the design of a building in an urban centre. In lectures and seminars, it deals with distinctive urban plans in the contemporary world, as well as a consideration of their historical provenance. The design exercise seeks to locate a complex building type, of mixed social use, within a developed urban fabric. The module assesses a student's capabilities, skills, knowledge and understanding that are brought to bear on such a design. The key design skill to be demonstrated is the integration of the conflicting demands surrounding a proposal that successfully balances the requirements of client, user and the public with the cultural, technical and environmental pressures encountered. As the final statement of student competence, the design will be expected to successfully demonstrate critical and reflective awareness of process across a wide range of indicators, including awareness of fine art theories and methods of production as applied to building. The outputs required will comprise a fully designed building proposal, including design studies and technical analyses of the building and its systems. This will be presented in a crit and submitted as a document online.

AR555 Architectural Practice

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Spring	H	15 (7.5)	100% Coursework with Compulsory Numeric Elements	Wislocki Mr P

Contact Hours

Approx 20

Learning Outcomes

Specific Learning Outcomes@
- Knowledge of current planning policy and development control legislation, including social, environmental and economic aspects, and the relevance of these to design development.
- Understanding of the nature of professionalism and the duties and responsibilities of architects to clients, building users, constructors, co-professionals and the wider society.
- The skills to critically examine the financial factors implied in varying building types, constructional systems, and specification choices, and the impact of these on architectural design.
- The skills to understand the cost control mechanisms which operate during the development of a project.
- Knowledge of the fundamental legal, professional and statutory responsibilities of the architect, and the organizations, regulations and procedures involved in the negotiation and approval of architectural designs, including land law, development control, building regulations and health and safety legislation.
- Knowledge of the professional inter-relationships of individuals and organizations involved in procuring and delivering architectural projects, and how these are defined through contractual and organizational structures.
- Knowledge of the basic management theories and business principles related to running both an architect's practice and architectural projects, recognizing current and emerging trends in the construction industry.

Generic Learning Outcomes:
9.1 The ability to identify individual learning needs and understand the personal responsibility required for further professional education.
- The ability to generate and manage digital information and to present this information clearly and effectively.
- An understanding of the context of the world of work, its contractual relationships and governing legislation.

Method of Assessment

This module will be assessed (100%) by a report. The report interrogates a building design proposal, as though it were a live project, in terms of appointment, practice and information management, procurement, planning permission, statutory permissions and cost.

Preliminary Reading

Chappell, David (2003), Understanding JCT standard building Contracts, London: Spon.
Eastman, Chuck et al (2011), BIM Handbook: a Guide to Building Information Modelling for Owners, Managers, Designers, Engineers and Contractors (2nd Edition), London: Wiley.
Green, Ronald (2001), The Architect's Guide to Running a Job, London: Architectural Press.
Harper, Roger (1997), A Student's Guide to the First Year in an Architect's Office, RIBA: London.
Marsh, SB and Soulsby, J (1989), Business Law, Wallingford: MacGraw.
Speaight, Anthony (2010), The Architect's Legal Handbook (9th edition), London: Architectural Press.

Pre-requisites

None.

Restrictions

Available to BA Architecture students only

Synopsis *

This module engages students with the professional practice of architecture. Assignments will review and analyse a design project from the perspective of professional practice. A series of lecture and seminars introduce students to the subjects of professional ethics, planning and building law, practice management, and building information modelling (BIM).

AR557 Urban Intervention

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Autumn	H	30 (15)	100% Coursework with Compulsory Numeric Elements	Street Tarbatt Mrs C

Contact Hours

76

Learning Outcomes

- Adequate knowledge of the application of appropriate theoretical concepts to studio design projects, demonstrating a reflective and critical approach.
- Knowledge of the creative application of such work (the fine arts) to studio design projects, in terms of their conceptualization and representation.
- Knowledge of theories of urban design and the planning of communities.
- Knowledge of the influence of the design and development of cities, past and present on the contemporary built environment.
- An understanding of the impact of buildings on the environment, and the precepts of sustainable design.
- An understanding of the way in which buildings fit into their local context.
- An understanding of the physical properties and characteristics of building materials, components and systems, and the environmental impact of specification choices.

Method of Assessment

100% Design Project

Pre-requisites

None

Restrictions

Available to BA Architecture students only

Synopsis *

This module engages students in the re-design of an existing urban centre or locality in two parts, beginning with a master-plan and public realm study, and moving on to the design of a detailed building design adapting and/or extending the existing building fabric. Initial lectures and seminars will provide an overview of the theory of urban design, introducing distinctive urban plans in the contemporary world, as well as a consideration of their historical provenance. The second part of the course will combine architectural design with technological and environmental solutions on the basis of the adaptation of an existing building or structure with extensions or adjoining buildings. This practical design project is informed by lectures, seminars and tutorials dealing with the technical, environmental, ergonomic, regulatory, historical, theoretical and aesthetic considerations of architectural adaptation and extension, dimensional coordination, movement and expansion, sustainable design for existing buildings, artificial and natural light, learning from building failures, properties of materials, forming openings in existing structures, and external and internal elements of construction

AR558 Architectural Design

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Spring	H	30 (15)	100% Project with Compulsory Numeric Elements	Smith Mr J (AR)

Contact Hours

76

Learning Outcomes

- An ability to prepare and present building design projects of diverse scale, complexity, and type in a variety of contexts, using a range of media, and in response to a brief.
- The ability to understand the constructional and structural systems, the environmental strategies and the regulatory requirements that apply to the design and construction of a comprehensive design project.
- An ability to develop a conceptual and critical approach to architectural design that integrates and satisfies the aesthetic aspects of a building and the technical requirements of its construction and the needs of the user.
- A knowledge of the creative application of such work (the fine arts) to studio design projects, in terms of their conceptualisation and representation.
- An understanding of the needs and aspirations of building users.
- An understanding of the need to critically review precedents relevant to the function, organisation and technological strategy of design proposals.
- An understanding of the need to appraise and prepare building briefs of diverse scales and types, to define client and user requirements and their appropriateness to site and context.
- An understanding of the contributions of architects and co-professionals to the formulation of the brief, and the methods of investigation used in its preparation.
- An understanding of the investigation, critical appraisal and selection of alternative structural, constructional and material systems relevant to architectural design.
- An understanding of strategies for building construction, and ability to integrate knowledge of structural principles and construction techniques. [GC8.2]
- An understanding of the physical properties and characteristics of building materials, components and systems, and the environmental impact of specification choices. [GC8.3]
- A knowledge of principles associated with designing optimum visual, thermal and acoustic environments. [GC9.1]
- Knowledge of systems for environmental comfort realised within relevant precepts of sustainable design. [GC9.2]
- Knowledge of strategies for building services, and ability to integrate these in a design project. [GC9.3]
- Skills to prepare designs that will meet building users' requirements and comply with UK legislation, appropriate performance standards and health and safety requirements. [GC10.3]
- An ability to relate the concepts underlying one's own design to themes in contemporary theory. [B5]
- An understanding of the alternative materials, processes and techniques that apply to architectural design and building construction. [GA3]

Method of Assessment

100% Design Project

Pre-requisites

None

Restrictions

Available to BA Architecture students only

Synopsis *

This module, the final one in the programme, will focus on the detailed design of a significant new building in an urban setting. The module assesses a student's capabilities, skills, knowledge and understanding that are brought to bear on such a design. The key design skill to be demonstrated is the integration of the conflicting demands surrounding a proposal that successfully balances the requirements of client, user and the public with the cultural, technical and environmental pressures encountered. The design and integrated technical proposals must therefore be contextual and developed with reference to historical and social aspects of the existing built environment. It will be expected that the final project will successfully demonstrate a critical and reflective awareness of process across a wide range of indicators, including awareness of fine art theories and methods of production as applied to urban and building design. The proposals will be submitted as documents online and presented in a final critique.

AR597 Dissertation

Version	Campus	Term(s)	Level	Credit (ECTS)	Assessment	Convenor
1	Canterbury	Autumn and Spring	H	30 (15)	100% Coursework	Bothwell Mr K
1	Canterbury	Autumn and Spring	H	30 (15)	100% Coursework with Compulsory Numeric Elements	Bothwell Mr K

Contact Hours

8 contact hours

Learning Outcomes

- The cultural, social and intellectual histories, theories and technologies that influence the design of buildings

- The influence of history and theory on the spatial, social, and technological aspects of architecture

- An ability to undertake investigation, speculation and exploration of complex design issues and critical awareness and debate
- An ability to undertake intellectual enquiry into an aspect of design
- An ability to evaluate evidence, arguments and assumptions in order to make and present sound judgments within a structured discourse relating to architectural culture, theory and design

- An ability to synthesise information from a number of sources in order to gain a coherent understanding of theory and practice.

- An ability to argue rationally and to draw independent conclusions based on a rigorous, analytical and critical approach to data, demonstration and argument

Method of Assessment

Written dissertation, 7,000 to 8,000 words (100%), or combination of crafted artefact and shorter supporting written dissertation of 4,000 words (100%)

Preliminary Reading

Borden, I., Ruedi, K. (2000) The Dissertation: An architectural student's handbook (London: Architectural Press)

"The Nature of Inquiry", in Cohen, L. and Manion L. (1994) Research Methods in Education (London: Routledge) pp. 1-43.

Subject related bibliography to be developed by student with the assistance of relevant supervisors and module related bibliographies.

Pre-requisites

None

Restrictions

BA Architecture students only

Synopsis *

This module offers students the opportunity to deepen their knowledge and understanding of a particular aspect of architecture. The topic to be studied is agreed with the Module Convenor and an appropriate supervisor is nominated from the teaching staff. Moreover the dissertation will provide students with the opportunity to develop more advanced academic research and writing skills. It forms part of the research strand within the architectural curriculum, which complements the design strand of the studio. Fortnightly supervisions lead to a draft handed in towards the end of autumn term, with the draft submission of ca 4000 words (for formative assessment) at the start of the Spring Term, and final submission (for summative assessment) of the 7,000-8,000 word dissertation during the Spring Term.

Students may opt to focus their research question around making and assembling an artefact, as a piece of research-through-practice, in which case the written element may be reduced by up to 50%, by agreement with the supervisor in combination with the submission of the artefact, which it will frame and discuss theoretically.