

Module Title: Cities and Communities	Module Code: EV7105 Level: 7 Credit: 15 ECTS credit: 7.5	Module Leader: Ruth Stevenson Additional tutors: Bryce Gilroy-Scott Frances Hill Jane Fisher Louise Halestrap Alan Owen Siobhan Maderson Tim Coleridge
Pre-requisite: none	Pre-cursor: none	
Co-requisite: none	Excluded combinations : none	
Location of delivery: CAT on-site and distance learning		
<p>Main aims of the module are to enable students to;</p> <p>Develop an overview comprehension of current research and discourse concerning adaptation planning and sustainability of cities and communities, and to place this understanding into current and future environmental contexts.</p> <p>Gain a thorough understanding of key elements, infrastructures, maintenance issues, energy budgets, material flows, waste disposal, transportation, social dynamics that underlie the development and management of communities and cities.</p> <p>Discern and assess critically the complex factors that influence the provision of sustainability and adaptation planning within urban and community focused environments.</p> <p>Recognise and rationalise the prospects for innovative research and practice for city and community regeneration in the built environment.</p>		
<p style="text-align: center;">Main topics of study:</p> <p>Within the context of increasing global-scale urbanisation and an ostensible loss of community coherence in densely-populated conurbations and wider ecosystem services, this module will explore current discourse on the status of cities and the communities that comprise them.</p> <p>The module will explore:</p> <ul style="list-style-type: none"> • How cities and communities will be influenced in general terms by the particulars of perceived challenges and opportunities presented by adopting a sustainability and adaptation approach in preparation for the significant challenges and radical changes consequent to climatic change. • The qualities and purposes of community spaces as part of the cultural urban landscape will be re-framed from a sustainability and adaptation planning perspective. • Environmental impacts, sustainability and adaptation issues facing the urban environment will be analysed according to its material, energy, infrastructure, maintenance and transportation demands. • Specific phenomena of cities (e.g. Urban Heat Island; Biodiversity Planning) will be considered and the urban regeneration and transformations required to address them as climate changes. • The supply of goods and services will be contextualised within the production, control and elimination of wastes and pollution. • The urban and community form will be analysed for the potential design, social structure and practice changes required under an ethos of sustainability and adaptation. • Current status of urban and community statutory development control and planning, enforcement of sustainable practices and key environmental legislation and compliance measures; as well as community-based initiatives and grass-roots strategies. 		

- Sectoral best practice for the assessment of environmental impact at strategic and local levels. Methods, tools and programmes of environmental management and assessment, and environmental key performance indicators aimed to deliver environmental performance improvements.

Learning Outcomes for the module

At the end of this module, students will be able to:

Knowledge

1. Apply a critical understanding of issues concerning the development of sustainable communities and cities within the context of adaptation and sustainability in the built environment;
2. Identify the influences and interconnectedness of the key political, social, economic influences on urban development; and the human relationship to material and energy systems within the context of the global ecosystems;
3. Evaluate theory and examples of innovations potentially useful in the transformation of urban environments towards sustainability;

Thinking skills

4. Assess and critically evaluate theories and practice in the field of sustainable development in cities and communities;
5. Holistically appraise the processes of urban development and develop forward planning strategies for future development;
6. Produce a critical analysis and evaluation of the technical issues challenging communities and cities at the infrastructure scale: materials; energy; water; waste, communications, transportation and green infrastructure;
7. Present a global perspective synthesising the different climatic change, environmental change, sustainability and adaptation planning pressures and problems facing communities, cities and local environments.

Subject-based practical skills

8. Evaluate the ethical dilemmas when problem solving and decision making, in the context of current environmental change and adaptation, during practice;
9. Show the ability to appraise multi-scale constituents of urban needs in combination with future scenario projections for practical application in society;

Skills for life and work (general skills)

10. Effectively communicate (written and oral) to a team or a wider audience.

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

On-site students will be supported through lectures, seminars and tutorials within the subject areas and in study skills. On-site students will also gain hands-on experience through practical tuition facilitated by specialist practitioners;

There is formative learning element to the module to allow the students to receive critical feedback on their work without the pressure of marked assessment.

For distance learning (DL) students, learning will be supported through Internet-based lectures (of the onsite lectures), situation related practical exercises, seminars and tutorials.

All students also have access to Moodle discussion boards and regular Skype surgeries, where they can meet with their peers and a tutor to discuss any academic issue.

Lectures onsite and through DL highlight key concepts, models and frameworks, and integrate additional resources (such as journal articles). They encourage deep learning through the use of self-assessment questions which encourage students to engage with the topic, to help students understand new topics and skills.

Assessment methods which enable students to demonstrate the learning outcomes for the module:	Weighting:	Learning Outcomes demonstrated:
For on-site and distance-learning students:		
1. Essay: (2,400 word max);	80%	1,2,3,4,5,6,7,8,9
2. Individual 10-minute presentation (600 words equivalent)	20%	10

Reading and resources for the module:

Core

Roaf S., Crichton D., Nicol F. (2009). *Adapting Buildings and Cities for Climate Change*. 2nd edition. Architectural Press, Oxford. (*)

Register, R (2013). *EcoCities: Rebuilding Cities in Balance with Nature*. Revised. New Society Publishers.

Recommended

Benton-Short, L. and J. R. Short (2008). *Cities and Nature*. Oxon, Routledge.

Girardet, H. (1999) *Creating Sustainable Cities*. Schumacher Briefings, Green Books. Dartington.

McLaren, D. and J. Agyeman (2015). *Sharing Cities: A Case for Truly Smart and Sustainable Cities*. Cambridge, MA, USA, MIT Press.

Van der Ryn S. & Calthorpe P. (2008). *Sustainable Communities: A New Design Synthesis for Cities, Suburbs and Towns*. New Society Publishers, Gabriola Island.

Wong, T-C., Yuen, B. (editors) (2011). *Eco-city Planning: Policies, Practice and Design*. Springer, Dordrecht.

Further relevant journals, websites and other relevant resources will be provided within reading materials that are made available for the module.

(*) Available as an e-book

Indicative learning and teaching time (10 hrs per credit):	Activity
1. Student/tutor interaction:	Activity and hours (lectures, seminars, tutorials, project supervision, demonstrations, practical classes and workshops) Contact learning: 30hr
2. Student learning time:	Activity (e.g. seminar reading and preparation/assignment preparation/background reading/ on-line activities/group work/portfolio/diary preparation, unsupervised studio work etc): Self directed learning: 120hr

Total hours (1 and 2):	150hr