



DESIGNING THE SUSTAINABLE CITY

IES Abroad London

DESCRIPTION:

Since 2007, a majority of the world's population has lived in cities – and this proportion will only increase. Urbanisation on this scale and as this pace creates challenges for humanity. For example, cities use 78% of the world's resources and produce more than 60% of greenhouse gas emissions. Across the globe, innovative cities are responding to these challenges by developing models for sustainable and resilient living. The most successful cities learn from each other and work together.

On this course, students will work in small teams to develop a solution to a sustainability challenge in London. Together, they will form and be part of a greater learning community, guided by faculty and outside experts working towards solutions to the identified problems. Students will use substantive field visits to gather valuable data and information as they develop their projects; they will make full use of technology to share their experience and findings with their colleagues; and problem-based learning will culminate in each team delivering a multi-media presentation to the group. Upon successful completion of this course, students will earn a micro-credential in Sustainability and Development that will demonstrate their sustainability literacy and ability to find innovative solutions to complex problems.

CREDITS: 3

CONTACT HOURS: 30

LANGUAGE OF INSTRUCTION: English

PREREQUISITES: None

ADDITIONAL COST: None

METHOD OF PRESENTATION:

The main outcome of this course is the challenge given to each of the teams – that is to design a project aimed at tackling a sustainability problem in London. The methods of presentation are designed to support the students in this challenge. The following approaches will be used:

- Classes: mostly held on-site in London but guest lectures and seminars may take place online.
- Team presentations: each team will give regular short presentations to the other teams on their work on the assignments. Students will give feedback to the other teams.
- Moodle fora: students are expected to contribute to fora where indicated on Moodle
- Class collaboration and discussion: most classes will be devoted to collaborative work, e.g. discussions and presentations. So that we can make the most of this time together, students are expected to spend prepare extensively before class.
- Materials on Moodle: key readings, videos and online resources designed to deepen understanding of the subject matter and foment discussion.
- Course-related trips: students will use these trips to inspire their designs and give them a chance to receive feedback from experts in the field. Teams will document the trips along with the faculty so they can share them with the other teams.

REQUIRED WORK AND FORM OF ASSESSMENT (all submission deadlines are on Moodle):

The following assignments are designed so that over the course of the term they each contribute something to the project that you will produce by the end of term.

- **Individual assignments – 50%**
 - Corporate strategy scenario planning submission (20%)
 - Participation – (20%)
 - End of term peer review (10%)
- **Team assignments – 50%**
 - Assignment 1 – how do we measure sustainability? (15%)
 - Assignment 2 – identify and present your sustainability issue in London (10%) midterm
 - Assignment 3 – final project and presentation (25%)

Participation

Participation is essential in this course. Students are required to engage with assigned materials, and to participate actively both in their team activities and in their discussions. A general participation rubric is available on Moodle.

Productive **participation** requires assiduous preparation, careful attention, and respectful commentary. It does not mean showing off, monopolising the mike, or baseless assertion. We will disagree with each other in class and that is fine – it is through debate and discussion, after all, that we learn and develop. Just because someone disagrees with you, it does not mean they are attacking you. Remember, too, in Joel Mogyr’s words, that little ‘insight is gained by judgement and indignation.’

An **A** means that you have read the material carefully and are ready to summarize its argument and offer a critique; that you are attentive to the discussion and your colleagues’ contributions; and that you contribute by making links, asking questions, or revealing aspects that have not been previously apparent. A **B** means that you have read the material and are an attentive, active participant in the discussion, but that your contributions remain within the boundaries set by the materials, your colleagues, or common sense. A **C** means that you have read the material, but that your contributions are occasional and/or out-of-focus. A **D** means that you have only skimmed through the material, and that your contributions are either minimal or off-point and distracting. An **F** means that you show no familiarity with the material, that you make no effort to contribute to the discussion, or that you continuously disrupt the work of the class as a whole.

Good **writing** relies on argument, evidence, and what Steven Pinker has recently called a ‘sense of style’. **A**-grade work is distinguished by an original argument; a judicious use of well-digested data and evidence; and a command of grammar, spelling, and punctuation. A **B** paper has a well-crafted argument but predictable argument; appropriately placed but inadequately exploited evidence or data; and serviceable but not seductive prose. A **C** paper is characterized by a loose or regurgitated argument; mechanical citation and support; and awkward paragraph structure, repetitive constructions, lapses into colloquialism, and overuse of the passive, adverbs, and the exclamatory voice. A **D** paper is marred by assertions rather than argument; the misreading or misuse of evidence; and simple grammatical and spelling mistakes. An **F** paper lacks an argument; shows no familiarity with relevant evidence; and has consistent problems with basic sentence construction.

Team Assignments

Students will be placed in teams, and take part in a series of assignments, which will each require examining a situation or proposal, and offering a solution or feedback, in line with instructions given. The assignments will build up to the identification of a key sustainability issue in their host city, and designing a project to tackle those problems. Teams will present reports on their responses to these assignments throughout the semester. At the end of the course, each team will deliver a multi-media presentation on their final design. The assignments will be guided by the faculty in a staged fashion, and each team will receive feedback from their peers. Rubrics will be provided to guide the students in completing their assignments, although the rubrics will leave space for originality and creativity. Grades will be awarded on the basis of the clarity and creativity of solutions, but also on the basis of the teams’ ability to work together, and to exchange ideas. Collaboration, and adapting other teams’ ideas to the local context will be positively evaluated.

LEARNING OUTCOMES:

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

- Identify key sustainability issues in a determined location
- Compare and critique sustainability policies in different locations
- Recognize and explain the complexity and interrelatedness of sustainability challenges
- Present their ideas to others and integrate feedback into their designs
- Differentiate between realistic and unrealistic goals for sustainability solutions
- Analyse the successes and failures of sustainability initiatives in other locations

ATTENDANCE POLICY:

Regular class attendance is mandatory. Irregular attendance may result in a lower grade in the course, and/or disciplinary action. The IES Abroad London class attendance policy does not allow for unexcused absences, and grades will be docked 1/2 letter grade for each such absence. Rare exceptions will be made for the following reasons:

- The student is too sick to attend class. In this instance, the student must call the IES Abroad Centre before class to notify any of the IES Abroad staff. It is not sufficient either to email, send a message with a friend or call the Centre after the class has started.

- A serious illness or death in the immediate family requiring a student to travel home. This requires written approval from the Centre Director before departure.

Arriving more than 10 minutes late to class may count as an unexcused absence. Immigration laws in the UK are extremely strict, and we jeopardize our legal status in hosting students who do not regularly attend class. Students who do not attend class regularly will be reported to the appropriate officials and risk dismissal from the program and deportation from the UK. If a student incurs three absences in any one course, this will trigger an administrative meeting with IES and a written warning. If another class is missed after the warning has been issued, a disciplinary review will be triggered and all absences hereafter will be unauthorized regardless of whether a student reports the absence or not. Authorization of absences hereafter will be determined on a case-by-case basis.

COURSE AND CLASS STRUCTURE:

The course will be twelve weeks long and will consist of two sections:

- Section 1: for the first six weeks, students will receive a grounding in key interdisciplinary topics related to cities and sustainability to give them a solid foundation to work on for the rest of the course. By the sixth week, they will have identified the sustainability issue that they wish to address
- Section 2: in the final six weeks of the course, students will work in teams to develop their designs following a structured process

CONTENT:

Week	Content	Assignments and Readings
SECTION 1		
1	History	• <i>The City – a History</i>, part 1. Radio 4 In our Time podcast • London Legacy Development Corporation 2030 vision • Field visit discussion forum
2	Energy	• V. Smil, <i>Energy and Civilisation: a history</i> (ch. 6 – Fossil-fuelled Civilisation)
3	Difficulties	• IPCC Fifth Assessment Report on Climate Change (2014) • S. Koonin, <i>What Climate Science Tells Us, What it Doesn't and Why it Matters</i> • M. Berners-Lee, <i>How Bad Are Bananas: The Carbon Footprint of Everything</i> • First group assignment – how can we calculate sustainability
4	Design	• G.J. Coates, 'The sustainable urban development of Vauban in Freiburg, Germany', <i>Intl. Journal of Design and Nature and Ecodynamics</i>, vol. 8, No. 4 (2013), pp. 265-86
5	Strategies	• Aditya Birla Group, '<2 Degrees C Futures', 1-17, then pages as assigned in your groups. • First individual assignment – corporate strategy
6	Project	• In class work in advance of the midterm presentation

SECTION 2		
7	Identifying the problem	Second group assignment – identify and present your sustainability issue in London
8	Group Project Work 1	
9	Group Project Work 2	
10	Group Project Work 3	
11	Group Project Work 4	
12	Course Conclusions	- Third group assignment – final project and presentation - Second individual assignment – peer review

COURSE-RELATED TRIPS:

Students will attend visits to a range of sustainability-related projects in each location, as well as visiting experts in different fields. Some of the trips will be designed before the semester starts, whereas others will be recommended by faculty in response to the development of the local team's research.