Faculty of Architecture, Landscape and Visual Arts

GRADUATE PROGRAM IN URBAN DESIGN

UNIT OUTLINE

The Forces that Shape Cities

URBD8807

Semester 1, 2011

Urban Design Centre of Western Australia

Unit Coordinator: Tim Greenhill
Unit details

Unit title: Forces that Shape Cities
Unit code: URBD8807
Credit points: 6
Availability: Semester One
Location: Urban Design Centre of Western Australia (UDC)
Mode: On-campus
Unit web page: http://www.alva.uwa.edu.au/students

Unit rules

Contact hours 36 (seminars 12 x 3hours per week)
Pre requisites/advisable prior study and incompatibility: Available at www.handbook.uwa.edu.au

Contact information

Unit coordinator: Tim Greenhill
Email: tgreenhill@udcwa.org
Phone number: (08) 9440 2400
Consultation hours: By appointment
UDC address: Urban Design Centre of Western Australia
Rm 4.19, ALVA Building, Nedlands Campus, University of Western Australia
M433, 35 Stirling Highway, Crawley, WA 6009

COMMUNICATION

When you enrol at UWA you are automatically assigned an email address. This address is then used for official electronic correspondence unless you advise in writing that this is not acceptable. For more information about your UWA Student Email account and services available, you should visit <http://www.ucs.uwa.edu.au/web/students/email>.

Staff may communicate with students by email, so all students should ensure that they:

(a) activate their Pheme account and student email account
(b) check their account regularly (at least twice per week)
(c) communicate with University staff ONLY through their student email account. (Staff are not required to respond by email to any other addresses.)
UNIT DESCRIPTION

Introduction
The purpose of this unit is to develop skills to investigate a city and begin to look beyond the obvious to identify what forces have shaped our cities over the years. This is done with a view to understanding how forces outside of an urban designers control can alter cities and how we, as urban designers, can anticipate these changes as we design for the future. By tracing the influence of different factors on cities through history, this unit stimulates students to speculate on the challenges of our swiftly changing world and the types of design responses required to meet them.

This analysis will be conducted on a range of international city and on Perth with the purpose of understanding how the same forces can result in different results dependant on the combination of forces at work. This unit acknowledges the city as an evolving organism and reinforces the idea that that urban design as a profession does not advocate a 'one size fits all' solution to cities but rather teaches practitioners how to recognise and respond to the interactions between a city, its environment and its populace.

Unit aims and objectives
- to identify and review the major forces influencing city form,
- to understand the inter-relationship of these forces, and
- to develop analytic skills and the ability to orally and graphically communicate the findings of research in a way that promotes creative questioning and productive speculation.

Learning outcomes
Students develop an appreciation of the history of urban development, with a particular focus on the progress of key forces that have shaped the city in different ways through the centuries, and the kinds of challenges these factors will impose on the city of the future. Students are expected to identify and use alternative methods of discovering the data they require to fully investigate a city. This is not a simple review of old maps but rather a detailed exploration of the range of resources available to the inquisitive that can help designers understand a city's evolution.

UNIT REQUIREMENTS

It is expected that students submit all written work in typewritten form. Access is provided to computers and software at the UDC and in the ALVA computer labs. Students must make their own arrangements to obtain and activate user accounts if they require use of these services.

UNIT STRUCTURE

Class types, venues, days and times
The class meets weekly on Tuesdays from 6:00 to 9:00pm for a 3 hour seminar and workshop. Typically this will include a presentation from an industry professional on a specific force and how it relates to Perth. This presentation will be followed by a pin up by students illustrating how the weeks topic has shaped their individual cities. These presentations will be subject to a collective workshop review to discuss the merits of the analysis and discuss links between each force.

Attendance/ participation requirements
This is a seminar/ workshop course, which means that most of the learning will proceed from individual research and group discussion. Regular attendance at all class meetings and active participation in the class discussions is required.

Material and equipment costs
No specific materials or equipment beyond the usual study aids are required for this unit.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Presentation/ Force</th>
<th>Lecturer</th>
<th>Workshop Discussion</th>
<th>Investigative Questions</th>
<th>Task for next session</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1st March</td>
<td>Introduction</td>
<td>T Greenhill</td>
<td><strong>Introduction:</strong> • Unit outline • Assessment • Handouts • Assign Cities</td>
<td>What makes a city?</td>
<td>1. Image illustrating how Politics has shaped your city.</td>
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<tr>
<td>2</td>
<td>8th March</td>
<td>Politics</td>
<td>T Greenhill/Guest Presenter</td>
<td><strong>Politics:</strong> The influence of politics on the shape of a city is readily visible in grand actions (such as Haussmann’s boulevards through Paris) but there are many smaller subtle actions that have just as significant an effect on the form and shape of cities (setback requirements in New York City). Political influence on a city can originate from high level government planning or from grass roots community activism. How has the city been shaped by its politics? Are there large infrastructure projects that have shaped the city? When were these built and what sort of government was in place during these major undertakings? In addition to looking for major infrastructural change also look for areas where no change has occurred. What does this mean? Is there a typical building form? Is a result of construction technology or were there political forces at play as well? Look at zoning and building controls through the years. What impact have these had on the city?</td>
<td>2. Image illustrating how Economics has shaped your city.</td>
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<td>3</td>
<td>15th March</td>
<td>Economics</td>
<td>T Greenhill/Guest Presenter</td>
<td><strong>Economics:</strong> A city’s growth often has a strong correlation to the flow of money. Boom times can lead to unplanned growth, lean times can result in emigration/shrinking cities Where are the traditional market areas in the city? Are they there or are there other clues as to their former existence (i.e. street names)? Are there areas of land unexpectedly built upon? Are there new areas of land that didn’t exist before (landfill)? How might the economy be responsible for this?</td>
<td>3. Image illustrating how the Environment has shaped your city.</td>
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<td>4</td>
<td>22nd March</td>
<td>Environment</td>
<td>T Greenhill/Guest Presenter</td>
<td><strong>Environment:</strong> The natural environment has the potential to impact every element of city building but we now also have the technology to disregard environmental factors. The environment includes topography, climate, fertility, vegetation, natural disasters amongst others. Rivers, mountains oceans. How have these impacted the city? Have they restricted or shaped growth in a specific direction? Has climate had an impact on the cities shape? What vegetation has been retained? If so why? and why there?</td>
<td>4. Image illustrating how Heritage has shaped your city. (Figure Ground)</td>
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<td>5</td>
<td>29th March</td>
<td>Heritage</td>
<td>T Greenhill/Guest Presenter</td>
<td><strong>Heritage:</strong> Cities generally start around a core or nucleus and grow from this point. Research and identify this initial nucleus. Why was this spot originally chosen as a suitable site for a city? What was this city’s initial function and has this function changed over the years? Does the initial site still function as the centre of the city? What evidence remains that marks this as the original site of the city? Does it have characteristics that distinguish it from newer parts of the city? Are there defined boundaries where a transition from old to new is made?</td>
<td>5. Image illustrating how Circulation has shaped your city.</td>
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<tr>
<td>Date</td>
<td>Day</td>
<td>Topic</td>
<td>Presenter</td>
<td>Notes</td>
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<td>6th Apr</td>
<td>5th April</td>
<td>Circulation</td>
<td>T Greenhill/Guest Presenter</td>
<td>Circulation: Transport technologies have had one of the most significant impacts on our cities but this expands beyond the street. Think about modes of transport beyond the automobile. Do street widths have a relationship to transport? Think about rear laneways and their function? Airports have flight paths. How might these impact the cities shape? 6. Image illustrating how Culture has shaped your city.</td>
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<td>7th Apr</td>
<td>12th April</td>
<td>Culture</td>
<td>T Greenhill/Guest Presenter</td>
<td>Culture: The demographics of a city will have a profound effect on the cities form. The age of a population, the religion, the ethnicity will all change how a city is formed and used. How might religion shape a city beyond the erection of churches, temples and mosques? Is the alignment of the streets significant? What about building heights? Does the size or shape of gathering spaces indicate anything? 7. Image illustrating how Technology has shaped your city.</td>
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<td>8th Apr</td>
<td>19th April</td>
<td>Technology</td>
<td>T Greenhill/Guest Presenter</td>
<td>Technology: Every new invention has the potential to shape and change our cities in unexpected ways. Many new technologies we now take for granted but how were things done before they were around? How have technologies shaped your city? How was that river crossed before the bridge was invented? Does commerce focus around that crossing point? What are the limits of brick construction? How and when were these overcome? 8. Image illustrating how Logistics has shaped your city.</td>
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<tr>
<td>26th Apr</td>
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<td>NON TEACHING STUDY BREAK</td>
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<td>9th May</td>
<td>3rd May</td>
<td>Logistics</td>
<td>T Greenhill/Guest Presenter</td>
<td>Logistics: What does it take to run a city? How efficient are our cities and would they run smoother if they were shaped differently? Where does the cities food come from? How do all these people get to where they need to be? Where does the energy come from? 9. Image illustrating how Population has shaped your city.</td>
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<td>10th May</td>
<td>10th May</td>
<td>Population/Density</td>
<td>T Greenhill/Guest Presenter</td>
<td>Population: The size of a cities population can influence its shape and vice versa. Is your city being driven by its population size or does the shape of the city restrict it? Where does the population reside? Where doesn’t the population reside? What clues indicate density? What infrastructure exists to accommodate the population? Gathering spaces? Road widths? Building heights? Are these always clear indicators or do we have to dig deeper? 10. Image illustrating a potential future for your city.</td>
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<td>11th May</td>
<td>17th May</td>
<td>Future/utopia/Dystopia</td>
<td>T Greenhill/Guest Presenter</td>
<td>Future: Based on the data gathered to date what shape will your city take in the future? What are the key elements that will dictate this? Is there a way these concerns might be overcome? 11. Develop an image related to your designated force for the City of Perth.</td>
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<tr>
<td>12th May</td>
<td>24th May</td>
<td>Workshop</td>
<td>T Greenhill</td>
<td>Identify and discuss what forces have shaped Perth.</td>
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<tr>
<td>13th May</td>
<td>31st May</td>
<td>Workshop</td>
<td>T Greenhill</td>
<td>Finalise and polish your weekly city analysis and compile into a booklet.</td>
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ASSESSMENT MECHANISM

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Due Date</th>
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</thead>
<tbody>
<tr>
<td>Contribution to workshops</td>
<td>10 %</td>
<td>On-going throughout the semester</td>
</tr>
<tr>
<td>International City Analysis (Individual)</td>
<td>20 %</td>
<td>Weekly – Final submission on 14th June 2011</td>
</tr>
<tr>
<td>International City Analysis (Group)</td>
<td>50 %</td>
<td>14th June 2011</td>
</tr>
<tr>
<td>Perth City Analysis (Individual)</td>
<td>5%</td>
<td>14th June 2011</td>
</tr>
<tr>
<td>Perth City Analysis (Group)</td>
<td>15%</td>
<td>14th June 2011</td>
</tr>
</tbody>
</table>

Supplementary assessment is not available in this unit.

ASSESSMENT ITEMS

1. Contribution to seminars
   Critical evaluation of the class presentations and contribution to the discussions are an important part of the learning experience of this unit. Students will be graded on the acuity of their observations and speculations, the ability to draw connections between the topics covered in each class and to recognize the challenges of current and future city design. This assessment will be worth 10% of the final grade.

2. International City analysis
   Students will be designated a major city from the list below for detailed analysis of the various factors that have shaped it through history. The purpose of this exercise is to help us gain a more comprehensive view of the way different factors and their interaction have conditioned the form of a major city and its region.
   - Rome, Italy
   - Jerusalem, Israel
   - Berlin, Germany
   - Tokyo, Japan
   - Dubai, United Arab Emirates
   - Tianjin, China
   - New York City, USA
   - Singapore, Singapore
   - Los Angeles, USA
   - Mumbai, India
   - Paris, France
   - Athens, Greece
   - Paris, France
   - Athens, Greece

   Working from an examination of the current form of the city, you will systematically “deconstruct” the existing urban complex to reveal the factors that have created its contemporary form. You should approach this analysis as a kind of urban “detective”: working backwards from observed conditions of the city today, to uncover the historic events or influences that produced them.

   In an analysis of San Francisco, for example, you should be looking for answers to questions like: why was the city located on a landlocked peninsula with a bad climate, no water supply and limited natural building materials when the other side of the bay offered easier access to the gold fields and some of the most fertile land in the State? (because there was deep water on the peninsula side of the bay which provided better berthing for ships); or why was the city laid out in a rigid grid pattern when it has such a challenging topography? (because it developed so fast in the gold rush of 1849 that surveyors adopted the most expedient way to divide up the land); or why is the Victorian architecture of different proportions to buildings of the same period and style elsewhere? (because the building lots were laid out using a traditional Spanish measure - the vara - which produced a wider street frontage than typical town lots in other developing cities of the period); or why does Columbus Street cut diagonally across the grid? Or why does the grid shift in geometry and scale on either side of Market Street? And why was Market Street so important anyway.....? etc., etc.
These are not the kind of issues that are addressed in a typical history book. Identifying the crucial questions will demand relentless curiosity in your examination of the current form of the city, and answering them will require research beyond the published material available on the city, and/or considerable speculation on your part.

Students will prepare on a weekly basis corresponding to the scheduled presentation for that week, an analysis of a force that has shaped their designated city. Each of the weekly forces will be captured in the form of a key image or datascape that defines how their city has responded to the force being discussed. These key images will be presented to the class each week, accompanied by an explanation of why the image was chosen and detailing how it has shaped the city. By the end of semester students will have produced a total of ten images each for their designated city that capture and define the forces at work. These images will be presented in a booklet at the end of semester with each city becoming a complete chapter. The booklet will be assessed on a group basis and will constitute 50% of the final grade. Assessment will consider the level of research and analysis undertaken, the creativity and ingenuity in identifying and defining the forces impact on the cities and the clarity of the graphical representation of the information. It is imperative that you work as a group to ensure that this booklet is of the highest quality and is of presentation standard.

Each student’s chapter will also be assessed individually and given a separate mark worth 20% of the final grade.

3. Perth City analysis
On a weekly basis a professional in a relevant field will be brought in to discuss their professions influence on Perth and cities in general. These discussions will form the basis of the final chapter of the booklet. A specific force will be designated to each student and an investigation of how this force has affected Perth will be undertaken. Each student will develop an additional image or datascape specific to Perth to be presented to the group on the 24th of May. These images will be compiled and will constitute the final chapter in the booklet. This final chapter will be assessed as a group and will be worth 15% of the final grade. The student’s individual image will be assessed and is worth 5% of the final grade.

Return of Student Work
Marked assessments submitted on time will be made available for collection by students at least one week before the next assessment in the unit is due, or no more than four weeks after submission, whichever is sooner.

STUDY SUPPORT SERVICES
Student Support
Student Services offers services and programmes that complement the university experience and promote links with the broader community. Information about the services offered is available at <http://www.studentservices.uwa.edu.au/ss>.

Student Guild
Information about the University Student Guild is available at <http://www.guild.uwa.edu.au>.

Academic Conduct Essentials
All newly enrolled students (at any level) are required to complete an on-line course on Academic Conduct Essentials (ACE). Further information can be found at <http://www.ace.uwa.edu.au>

POLICIES AND PROCEDURES
Charter of Student Rights
The University’s charter of student rights is available at <http://www.secretariat.uwa.edu.au/home/policies/charter>.
**Attendance**
Under General Rule 2.1.15, students are required to attend prescribed classes and submit work of a satisfactory standard. Under General Rule 2.1.16, a student may be prohibited by the Faculty from undertaking further study or examination in the unit concerned if the requirements of 2.1.15 are not met.

**Appeals**
Where there is dissatisfaction with an assessment result and/or progress status students may lodge an appeal. For information regarding the appeals process please go to <http://www.secretariat.uwa.edu.au/home/policies/appeals>.

**Extensions**
The Faculty approves extensions only in exceptional circumstances in order to ensure that all students are treated fairly and that submission date schedules, which are designed to produce ordered work patterns for students, are not disrupted. Extensions may be authorised only by the UDC's Graduate Program Coordinator. Academic staff members do not have the authority to approve extensions. Extensions will only be allowed for the following situations:
- Medical
- Exceptional personal difficulties
- Work and other extracurricular commitments
- Computer related difficulties

In all cases, requests for extensions require the submission of an official extension form before the due date. The form should be completed fully and accurately and a written explanation for the request supplied on the back of the form. Forms should be submitted to the Graduate Program Coordinator at the UDC who, in consultation with the unit coordinator, will consider whether there are adequate grounds for an extension, the date of which will then be specified by the Graduate Program Coordinator.

Forms submitted after the due date will not be accepted unless the student is too ill to attend university to lodge the form, in which case the form may be lodged with the medical certificate when the student returns to university. In these cases students should make a reasonable effort to inform the faculty verbally that they will be applying for an extension. To view the full AVLA Extension policy and application procedures go to:
http://www.alva.uwa.edu.au/students/policies/extension

**Submission of late work**
The late work policy should be read in conjunction with the ALVA Extension Policy. The policy does not in any way affect a student's ability to apply for a formal extension of time for the submission of an assessment under the guidelines set out in the ALVA Extension policy.

All assessment tasks are due at 5pm on the date indicated in the unit's Assessment Mechanism Statement, with the exception of in-class assessment items such as tutorial presentations. Assessment tasks will receive a penalty of 5 marks for each day that they are late. The weekend will count as two days (i.e. any assessment due on a Friday but submitted on a Monday will receive a 10 mark penalty). Assessment tasks which are more than 10 days late (including weekends) will receive a mark of 0 but feedback will still be provided.

For further information regarding the ALVA late work policy go to <http://www.alva.uwa.edu.au/students/policies/assessment/late-work>.

**Special Consideration**
Special consideration allows Faculties to take into account significant and unforeseen factors that may have affected your academic preparation or performance. Consideration is given to significant personal illness, the death or serious illness of someone close to you, or other significant circumstances that compromise your studies. It allows your Faculty to make informed and fair decisions concerning your academic progress (eg extensions for assignments, withdrawal or course change, determining your final grade in a unit of study, or approval of deferred examination).
Students who believe they may be eligible for special consideration should make an appointment to meet with the Manager, Student Office as soon as possible after the onset of the medical condition or other circumstance. For information regarding special consideration please go to <http://www.guild.uwa.edu.au/home/student_assistance.academic_help/special_considerations>.

**Digital Submissions**

Unless specifically directed to submit work in digital format, no digital submissions will be accepted.

ALVA has developed a digital submissions policy designed to provide guidance for students with respect to the timely completion of assignment work, and the development of practices that ensure the work of students is not wasted (or does not disappear) in the event of time mismanagement or computer malfunction. The ALVA Digital Submissions policy is available at: http://www.alva.uwa.edu.au/students/policies/digital-submissions

**Academic conduct and Ethical Literacy**

The Faculty and the University take issues of academic literacy and ethical scholarship very seriously. The University has developed a series of policies relating to ethical literacy and the Faculty's Academic Conduct Policy reflects these guidelines. The Faculty uses the University wide reporting and penalty mechanisms for students found to have been involved in academic misconduct. To view the Faculty's Academic Conduct Policy please refer to <http://www.alva.uwa.edu.au/students/policies/assessment/academic-conduct>.

Academic misconduct includes plagiarism, collusion and other forms of cheating. The University of Western Australia defines Academic Misconduct as “any activity or practice engaged in by a student that breaches explicit guidelines relating to the production of work for assessment, in a manner that compromises or defeats the purpose of that assessment”.

Academic Misconduct includes (but is not limited to):

- Collusion
- Inappropriate collaboration
- Plagiarism
- Misrepresenting or fabricating data or results or other assessable work
- Inappropriate electronic data sourcing / collection
- Breaching rules specified for the conduct of examinations in a way that may compromise or defeat the purposes of the assessment.

Plagiarism occurs when someone disguises or misrepresents the authorship or work and claims it as his or her own. It can occur in various forms:

- presenting, part or whole of another student's essay, design project or artwork as one's own
- copying phrases, sentences or passages from a published source (usually an article or a book) without acknowledging this by quotation marks and a reference
- substantially copying design elements or images from other design projects or artworks, such as to misappropriate and misrepresent the substance, strategy or personal expression of the original design project or artwork
- presenting in your own words an idea, argument or interruption from another source, without indicating the source by means of a reference.

**Use references when using other people's ideas.**
TEXTBOOKS AND RESOURCES

Recommended Texts

There are no general texts for this unit as each city will have its own unique set of information. It is recommended, however, that you become familiar with the following books which you will find valuable as general references.

For more or less comprehensive surveys of the history of cities, see:


For ideas on visual representation of information and datascapes the following texts are recommended:


• Edward E Tufte: The visual display of Quantitative Information, Graphics Press (Cheshire Connecticut), 2001

• Ricky Burdett and Deyan Sudjic, The Endless City: The Urban Age Project, Phaidon Press (London), 2007