

Course Outline

Code: ENP336

Title: Strategic Infrastructure Planning

School: Social Sciences
Teaching Session: Semester 1
Year: 2019
Course Coordinator: Dr Nicholas Stevens - nstevens@usc.edu.au
Course Moderator: Dr Marcus Bussey – mbussey@usc.edu.au

Please go to the USC website for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1 Description

This course will focus on the planning and provision of infrastructure in the strategic planning context. You will consider the principles, complexities and processes necessary for delivering various types of necessary physical and social infrastructures. You will consider the relationship between influences like population and employment growth and the correlation between the demand and provision of infrastructure. The criticality of planning for infrastructure will be explored including the impacts of limited infrastructure planning on achieving smart and sustainable communities.

1.2 Field trips, WIL placements or activities required by professional accreditation

Activity	Details
Nil	Nil

2. What level is this course?

300 level Graduate - Independent application of graduate knowledge and skills. Meets AQF and professional requirements. May require pre-requisites and developing level knowledge/skills. Normally taken in the 3rd or 4th year of an undergraduate program.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

Specific Learning Outcomes	Assessment tasks	Graduate Qualities or Professional Standards mapping
On successful completion of this course, you should be able to:	You will be assessed on the learning outcomes in task/s:	Completing these tasks successfully will contribute to:
Identify the range of infrastructures that contribute to the operation and facilitation of regional and urban systems.	1 & 2	Sustainability-focussed. Knowledgeable.
Identify and describe the issues around supply and demand of infrastructures,	1 & 2	Empowered

Specific Learning Outcomes On successful completion of this course, you should be able to:	Assessment tasks You will be assessed on the learning outcomes in task/s:	Graduate Qualities or Professional Standards mapping Completing these tasks successfully will contribute to:
including details of a range of demand management strategies.		
Carry out research into different infrastructures and communicate findings across a range of regional and urban contexts and organisations.	2, 3 & 4	Creative and critical thinkers. Sustainability-focussed.
Perform critical analysis and synthesis with both qualitative and quantitative data in reports.	2, 3 & 4	Creative and critical thinkers. Empowered.

5. Am I eligible to enrol in this course?

Refer to the [USC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1 Enrolment restrictions

Nil

5.2 Pre-requisites

Nil

5.3 Co-requisites

Nil

5.4 Anti-requisites

Nil

5.5 Specific assumed prior knowledge and skills (where applicable)

Nil

6. How am I going to be assessed?

6.1 Grading scale

Standard – High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL)

6.2 Details of early feedback on progress

Reflection and review of all content is encouraged in weekly interactive tutorials, and feedback will be given in class.

6.3 Assessment tasks

Task No.	Assessment Product	Individual or Group	Weighting %	What is the duration / length?	When should I submit?	Where should I submit it?
1	Quiz/zes	Individual	25%	1 hour	Week 5	In Class
2	Report	Individual	35%	2000 words	Week 7	Online Assignment Submission

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3	Activity Participation	Group	5%	Submission of GIS input layers	Week 9	In Class
4	Report	Group	35%	3000 words	Week 13	Online Assignment Submission
			100%			

Assessment Task 1: Online Quiz

Goal:	To allow you to reflect on, demonstrate and evaluate your own knowledge and understanding of key concepts, definitions, theories and principles relevant to strategic infrastructure planning.
Product:	Quiz/zes
Format:	The quiz will be a mix of short answer questions.
Criteria:	You will be assessed on the: <ul style="list-style-type: none"> • ability to correctly identify and apply terminology, knowledge, concepts and theories related to regional infrastructure planning • accuracy of your answers

Assessment Task 2: Technical Report

Goal:	The goal is to use demographic, spatial, and technical information and literature to critically analyse options for water or energy supply to the Sunshine Coast.
Product:	Report
Format:	<p>The topic will be established within the first 3 weeks of the course.</p> <p>As part of your role as a planner, it is critical not only that you are able to review and analyse information, but also able to present it in a professional manner to your target audience - colleagues, clients, or a project stakeholder group.</p> <p>Undertake a comparative analysis of a centralised and decentralised mechanism for delivery of infrastructure on Sunshine Coast. Describe each mechanism. Using theoretical concepts of infrastructure planning, analyse how each option could contribute to meeting Sunshine Coast demand for that infrastructure. Assess strategies and policies that support your options or present barriers.</p> <p>Electronic copies of the essay should be submitted through Blackboard by 5pm on the Friday (Week 7).</p> <p><i>**Please ensure that you retain backup copies of your essay. This is a requirement of the course. You may be asked, in various circumstances, to produce a copy.</i></p>
Criteria:	You will be assessed according to levels of achievement in the following: <ul style="list-style-type: none"> • the depth of understanding of infrastructure planning concepts and their application • the quality of critical analysis of strategies and policies • the level of professional credibility through use of appropriate academic, technical, and policy references providing evidence, and succinct quality writing

Assessment Task 3 & 4: Activity Participation and Submission of Technical Report including GIS modelling

Goal:	As a group, you will provide a report on the issues and opportunities for infill development within an urban centre and the infrastructure servicing strategies for that development. Each group will produce one GIS model with a development scenario for revitalisation.
Product:	Report

Format:	<p>The aim of your report is to assist government in recognising the opportunities for infill development and the efficient use of existing and planned infrastructure are explored.</p> <p>For this assignment, you will work in groups to identify and model in GIS, opportunities for infill development in a particular urban centre.</p> <p>Each group will:</p> <ul style="list-style-type: none"> • Undertake a review of current land use and infrastructure planning specific to the case study urban centre • Develop an infill development scenario that achieves the vision, aims and objectives for infill development in the case study urban centre • Identify the type, scale, location and timing of infill development • Model the infill development scenario • Identify existing and planned infrastructure that are impacted by the infill development scenario • Identify the relevant standards of service used to plan for each network • Describe each individual's contribution to the group work. <p>Each group must participate and submit their infill development modelling layers to have them processed in the Forecaz Modeller by Week 9.</p> <p>Electronic copies of the essay should be submitted through Blackboard by 5pm on the Friday (Week 13).</p>
Criteria:	<p>You will be assessed on:</p> <ul style="list-style-type: none"> • The clarity, understanding, critical analysis of literature and relevance of the infill development strategy in context of the project vision, aims and objectives. • The quality, comprehensiveness, and accuracy of the GIS model input data. • The findings and recommendations of your report. • Quality of syntax; mapping and graphics to illustrate your analysis. • Individual contribution to group work as agreed by group.

7. Directed study hours

The directed study hours listed here are a portion of the workload for this course. A 12 unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Directed study hours may vary by location. Student workload is calculated at 12.5 learning hours per one unit.

Location: Specific Campus(es) or online:	Directed study hours for location:
Sippy Downs	3 hr workshop

8. What resources do I need to undertake this course?

Please note that course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Blackboard site. Please log in as soon as possible.

8.1 Prescribed text(s) or course reader

Lists of required and recommended readings may be found for this course on its Blackboard site. These materials/readings will assist you in preparing for tutorials and assignments, and will provide further information regarding particular aspects of your course.

8.2 Specific requirements

Nil

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low.

It is your responsibility as a student to review course material, search online, discuss with lecturers and peers, and understand the health and safety risks associated with your specific course of study. It is also your responsibility to familiarise yourself with the University's general health and safety principles by reviewing the [online Health Safety and Wellbeing training module for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1 Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Blackboard, are electronically checked through SafeAssign. This software allows for text comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

10.2 Assessment: Additional requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

- a) The final mark is in the percentage range 47% to 49.4%
- b) The course is graded using the Standard Grading scale
- c) You have not failed an assessment task in the course due to academic misconduct

10.3 Assessment: Submission penalties

Late submission of assessment tasks will be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task.
- 10% (of the assessment task's identified value) for the third day
- 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.
- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task.

Weekdays and weekends are included in the calculation of days late.

To request an extension, you must contact your Course Coordinator and supply the required documentation to negotiate an outcome.

10.4 Study help

In the first instance, you should contact your tutor, then the Course Coordinator. Additional assistance is provided to all students through Academic Skills Advisers. To book an appointment or find a drop-in session go to [Student Hub](#).

Contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au

10.5 Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website:

<http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.6 General Enquiries

In person:

- **USC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **USC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **USC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **USC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **USC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au