



Institute of Transport and Logistics Studies

144 Burren Street, Newtown, Sydney

Directions and map: <http://sydney.edu.au/business/itls/about/directions>

Note: ITLS is not on the main campus

Please see the ITLS website for other important details about units at ITLS:

http://sydney.edu.au/business/itls/courses/transport_and_logistics

ITLS student enquiries office:

Email: business.itlsinfo@sydney.edu.au

Office: Room 312B, Level 3, ITLS, 144 Burren Street, Newtown

Assessment collection / viewing: Monday to Friday 12pm to 1.30pm ONLY

Timetable:

Please note that the timetable provided in this outline is subject to change. You should check your timetable on MyUni for final dates and to see which group you have been assigned to, see: <http://myuni.usyd.edu.au/>



TPTM6241

Transport Modes and Systems Semester Two, 2011

Unit of study outline

Unit Coordinator: Dr Sean Puckett*

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Consultation times: By appointment.

Please use email as your first method of communication.

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Office: ITLS Building, Level 2, Room 212

Consultation times: By appointment.

Please use email as your first method of communication.

**In case Dr Puckett is unavailable at any point, Dr Clifton will serve as unit coordinator.*

Classes

Class times: 9:00AM to 5:00PM

Venue: LT2, Level 2, ITLS Building, 144 Burren Street, Newtown

Class	1	2	3	4	5	6
Day	Friday	Friday	Friday	Friday	Friday	Friday
Date	29 July 2011	12 August	26 August	23 September	07 October	21 October

See Section 7 for more information about each class and other important dates.

1. Unit of study information

1.1. School handbook description

This unit offers students a comprehensive knowledge of the physical and economic structure of each of the fundamental modes of transport for private and commercial stakeholders. In this fundamental introductory unit, each mode - road, rail, air and sea - is presented from economic and market intelligence perspectives, giving students vital information on what drives passenger and freight behaviour and how the modes are interlinked. Students will participate actively, learning intelligent and strategic transport decision-making and communication skills through a series of team-based strategic activities. These skills will improve students' ability to perform well in subsequent units and ultimately in their transport or logistics careers.

1.2. Pre-requisite units

There are no pre-requisite units of study for this course.

1.3. Assumed knowledge and/or skills

This is a foundation unit in transport, and hence the only knowledge and skills you should have are the fundamental study and communications skills required to complete a unit of study successfully at the postgraduate level. You will be given a basic transport knowledge assessment on Day 1 of class to gauge your general level of transport knowledge; the assessment does not count toward your class grade and you can take it multiple times (you are required to complete it with a passing mark of 50 per cent or greater once before the semester is over).

1.4. Workload requirement

It is expected that you will spend approximately 150 hours on this unit (including preparing for and attending classes) and produce approximately 9,000 words or equivalent of work. This time should be made up of reading research, working on exercises and problems and participating in classes. In periods where you need to complete assignments or prepare for examinations, the required workload may be greater.

2. Learning aims and outcomes

2.1. Aims of the unit

The primary aim of this unit is for students to master knowledge of fundamental concepts relating to transport systems and the modes of transport within. This is essential for MTM students, who will benefit greatly in their subsequent study and careers from strong confidence in their knowledge of what drives behaviour and efficiency within transport systems. This unit is also targeted at supporting the knowledge of students in the MLM and related degrees, due to the vital influence that transport systems have on the function of logistics systems.

The second aim of this unit is for students to build their strategic decision-making and critical analysis skills both independently and within teams. A central component of this unit is a series of team-based exercises, in which students will have the opportunity to develop and justify strategies in response to a hypothetical scenario related to a key concept. Students will be presented with opportunities to evaluate information in transport-related scenarios, to identify implications of the information, and to reveal how they would respond strategically with respect to this information if they were acting in a decision-making capacity in these scenarios. Interacting effectively with team members is critical for success within these tasks, whilst achieving one's goals independently within these tasks (as well as within other assessments) is critical for success in the unit overall.

2.2. Learning outcomes

This unit is targeted at two primary groups of learning outcomes: (i) research and inquiry, and (ii) communication.

Research and Inquiry: **Graduates of the Faculty of Economics and Business will be able to create new knowledge and understanding through the process of research and inquiry.**

Research and inquiry skills will be developed through the following objectives:

1. Demonstrate a knowledge base in the following areas: essential ideas for each of the main transport modes; interdependencies and competition between modes; institutional challenges governing transport; factors governing the supply and demand of transport services.
2. Identify, define and analyse problems and recommend creative solutions within real-world constraints.
3. Conduct research using archives, libraries, the web and other sources of information.

Communication: **Graduates of the Faculty of Economics and Business will recognise and value communication as a tool for negotiating and creating new understanding, interacting with others, and furthering their own learning. Communication skills will be developed through the following objectives:**

4. Confidently and coherently communicate, orally and in writing, to a professional standard.
5. Develop coherent arguments when recommending solutions and critically evaluating theories.
6. Demonstrate skills working in teams.

These objectives will be met through participating in class discussions and exercises, writing clear and concise reports and group projects, and preparing and participating in team scenario presentations.

2.3. Links between learning outcomes and learning and teaching methods

The team-based learning approach in this unit of study centres on enabling students to develop their research and communication skills independently and in groups, based upon a foundation of information and instruction provided by the lecturer. The classes in this unit (after Day 1) involve the following process:

1. Lecture notes and assessment concepts for the following class day are provided via Blackboard several days in advance. In this time, it is students' responsibility to read the assigned material and to gather and interpret relevant academic articles relating to the assessment concepts. This links to research and inquiry.
2. Students are given an individual readiness assurance test at the beginning of the class, to test the degree to which they mastered the assigned class material for the day. This links directly to research and inquiry.
3. Students then re-take the readiness assurance test together with the rest of their group members, submitting one group paper; this links directly to communication.
4. The lecturer expands upon the lecture material, based upon areas of interest indicated through test answers and any ensuing discussion; this also links to communication.
5. After the morning lecture, groups are given their team scenario for the day. Each group has an allotted amount of time to complete their tasks for the afternoon, submitting their work as a group to the lecturer. The tasks relate to assigned reading topics and group discussion, which links to both research and inquiry and communication.
6. In the final portion of the class day, each group discusses their team strategy briefly, which gives them an opportunity to clarify why their work may be innovative or otherwise worthy of a relatively high mark; this also allows each group to gain an understanding of what the other groups have done in the same task. This links to communication.

2.4. Links between learning outcomes and assessment

Students will be given a range of assessment types to enable the development of skills and knowledge relating to each learning outcome, as well as to offer opportunities for students of different learning styles and interests to have an equitable opportunity to excel in the unit of study.

The objectives for research and inquiry will be met through reading assigned material, attending all lectures, reviewing your notes before and after each lecture, and undertaking thorough research using academic sources to build and support arguments in your written work and team scenarios.

The objectives for communication will be met through participating in class discussions and exercises, writing clear and concise reports and group projects, and preparing and participating in team scenario presentations.

3. Assessment

Assessment items	Relevant unit learning outcome/s	Word length	Weight	Due Date*
0. Basic Knowledge Assessment	1	500 words	0%	12 August 2011
1. Report	1, 3, 4 & 5	1500 words plus references	20%	16 September 2011
2. Readiness Assurance Tests	1	1250 words total	30% total (4% per individual and 2% per group)	At the beginning of Days 2-6
3. Team Scenarios	All	1250 words total, plus up to 500 words per team summary	20% total (4% per scenario)	At the end of Days 2-6
4. Team Project	All	2000 words, plus up to 1000 words per team summary	30% total (25% individual and 5% group)	28 October 2011
Academic honesty module **		N/A	0%	15 August 2011

* The due date is also the closing date. This means that assessment items will not be accepted after the due date except by prior agreement.

** Students must complete the academic honesty module in Blackboard with a mark above 80% by the final day of exams, or an Absent Fail (AF) grade will be given for the entire unit. Students can complete the module multiple times until this grade is achieved. Students who completed the module with a score of 80% or above last semester do not need to do it again.

All assignments must be submitted electronically via Blackboard. Assignments submitted electronically via Turnitin do not require cover sheets. Ensure that your student ID number (SID) is in the top right hand corner of each page for individual assignments and the Group name or number plus SID of all members is in the top right hand corner for group assignments. Full information about how to prepare assignments for electronic submission can be found in the Turnitin Student Guide:

http://blackboard.econ.usyd.edu.au/webapps/portal/frameset.jsp?tab_tab_group_id= 20_1

Should submission problems occur, students should contact Business School eLearning Support first on 9036 6433 or business.elearning@sydney.edu.au or the Unit Coordinator as soon as possible.

3.1. Detailed assessment information

1. An **individual report** (worth 20% of the total) is due on 16 September. You will submit a report on a major theme in transport (e.g., traffic modelling, privatisation of public transport, commuter mode choice). The theme must be approved by the coordinator. Your report should be no longer than 1,500 words and should contain references to at least three relevant articles from academic journals.

Your report should: (1) present key information about the theme; (2) use verifiable evidence (i.e., material from journal articles) to support your discussion; and (3) explain how concepts from the theme relate to at least one other transport mode that is not directly tied to the theme.

The report structure **MUST** follow the structure set out in *How to Write a Paper, Report, Essay, or Thesis at the Institute of Transport and Logistics Studies*.

Further details of the assessment will be provided to you via the Unit of Study's Blackboard site.

2. **Readiness assurance tests** (worth 30% of the total) will be given at the beginning of Days 2 through 6. At the beginning of lecture days 2 through 6 you will be given two identical multiple-choice tests covering material that is assigned for that day (i.e., readings from the class text, lecture notes). You will have twenty minutes to answer the questions on your own. Following the individual test, you will have the opportunity to discuss the questions with your group members and then submit one test paper for the group as a whole. Each of these tests is worth three percent of your total class grade. The group portion of the test allows group members to share insight and to debate questions when no consensus answer is present.

Following the group tests, you will be given the answers and you will have the opportunity to discuss the justification for the answers. The lecture will then cover material that the class had a relatively difficult time with. This component of a team-based learning approach gives you both instant feedback (i.e., marks are received immediately) and an adaptive lecture structure that is targeted at class content that is most important to cover in detail.

3. **Team scenarios** (worth 20% of the total) will be due at the end of Days 2 through 6. The team scenarios are the major strategic element of this unit of study. The second half of each lecture day is dedicated to working in your teams to address a decision-making scenario involving key concepts from the assigned material and lectures. Your team, which is assigned in advance and allocated a business function, will be posed with a scenario, and given the opportunity to develop an optimal strategy for the scenario.

Your team's primary responsibility in each scenario is to demonstrate an understanding of key concepts from the unit of study within an intelligent response to the scenario. You will work with team members to refine your strategy, and to build a specific argument supporting your strategy. Each team will present its strategy in the final segment of the lecture day, in informal presentations lasting approximately ten minutes. Whilst it is not mandatory for each team member to discuss their team strategies equally in any given presentation, it is your responsibility to ensure that you participate in the discussions equally overall; your individual score will be adjusted above or below the group average score if either the lecturer or your team members observe you contributing significantly above or below the group average.

This semester, the general setting for the strategic scenarios is the Southeast Asian airline industry. Groups will represent airlines, airports, and potentially other competing or collaborating stakeholders. When finding material to support your team's strategies, you are limited to information directly relating to Southeast Asia, however; this example has simply been chosen for its relevance. Indeed, students are encouraged to find material outside of class that relates to assigned content when developing and supporting their strategies, and this material can address other markets (e.g., European air travel) or other modes of transport (e.g., competition amongst logistics providers).

To aid in the productivity of these sessions, you will be given information about the general area of the upcoming scenario in advance, to enable you to find information relating to the topic that you can bring to class to discuss with your teammates.

At the end of each class day, students will be given a peer review form. The purpose of this form is to evaluate each group's appraisal of the contribution that each member made to the group. This document must be completed individually and without consultation with other members of the group, as it forms the basis of the allocation of marks within the group. Please ensure that you follow the instructions, including providing appraisals for each member, including yourself. Further information will be discussed regarding this process in class, and the peer review form will be provided via Blackboard. The unit of study coordinator reserves the right to moderate peer review marks based on the observation of the group at work. The peer reviews will remain confidential to the unit coordinator.

4. A **team project** (worth 30% of the total) is due on 28 October. The team project is a group written

assignment that centres on your ability both to conduct independent work that involves critical thought, and to assimilate your work with the work of team members to create a synthesised strategic document. Hence, you have two primary responsibilities in this assessment: (1) to work independently to write a section of the group document; and (2) to work with group members to tie the material together, and to write introduction, conclusion and (if necessary) appendix sections that address the total content of the document.

You are free to write about any topic relating to interdependence in transport decision-making that is relevant from the perspective of your team's role in the team scenarios (i.e., airport or airline). That is, each person in the group can write about any topic that discusses one or more issues involving some relationship between multiple decision makers (i.e., individuals or organisations) in some area of transport. It is your responsibility to discuss how the concept is relevant to your (simulated) airline or airport. The group component of the assignment involves a summary introduction and conclusion linking each team member's contribution, clarifying how the themes fit together and how they are relevant to your organisation. Ultimately, you should treat the document as a unified document that could serve to highlight to decision-makers in the organisation how issues of interdependency between individuals, firms and other groups matter to the success of your organisation.

Each team member should use at least five peer-reviewed academic sources to support his or her argument. Your individual contribution to the team project should be no more than 2,000 words (not including references or citations).

The project structure **MUST** follow the structure set out in How to Write a Paper, Report, Essay, or Thesis at the Institute of Transport and Logistics Studies.

Further details of the assessment will be provided to you via the Unit of Study's Blackboard site.

After submitting the project, students will be given a peer review form. The purpose of this form is to evaluate each group's appraisal of the contribution that each member made to the group. This document must be completed individually and without consultation with other members of the group, as it forms the basis of the allocation of marks within the group. Please ensure that you follow the instructions, including providing appraisals for each member, including yourself. Further information will be discussed regarding this process in class, and the peer review form will be provided via Blackboard. The unit of study coordinator reserves the right to moderate peer review marks based on the observation of the group at work. The peer reviews will remain confidential to the unit coordinator.

3.2. Referencing style and style guide

For this unit the referencing style is the Harvard Referencing Style. Students should download and adhere to the 'How to write a paper at the Institute of Transport and Logistics Studies' report available at http://sydney.edu.au/business/itls/courses/transport_and_logistics/student_resources.

3.3 Feedback on assessment

Timely feedback is intended to help you to improve your learning during the unit. Feedback will be provided on each assessment within 21 days of submitting the assessment, but will be available on the in-class assessment either on the same day (for readiness assurance tests) or within 48 hours (for in-class team strategies). In this unit you will receive the following types of feedback:

Marks will be posted into the Blackboard gradebook when all results for an assessment have been compiled. Marks will not be given over the phone. Errors made in your assessments are written on your reports and/or on marking sheet.

For each assessment task you will get an overall comment as well as an indicator against the level of achievement against each of the assessment criteria.

A summary of class-wide errors and appropriate improvement action for each criterion is provided on Blackboard where appropriate.

If you would like further feedback on the assessment task, you are encouraged to ask during class or consultation hours. This can be done in pairs or groups if you have similar issues to raise.

3.4. Academic honesty, plagiarism, legitimate cooperation and groupwork

Commencing students should complete the academic honesty module available via Blackboard before their first assessment submission. Students should refer to Business School and University policies on academic dishonesty and plagiarism

(sydney.edu.au/business/currentstudents/student_information/student_administration_manual), copyright (sydney.edu.au/senate/policies/Intellectual_Property_Rule.pdf) and the 'All your own work website' (sydney.edu.au/student_affairs/plagiarism_index.shtml) for information about legitimate cooperation, group work, how to reference correctly and how to avoid plagiarism.

Academic honesty is important to protect students' right to receive due credit for work submitted for assessment. It is clearly unfair for students to submit work for assessment that dishonestly represents the work of others as their own and gain marks and degrees, which are not based on their own efforts and abilities. Deliberate breaches of academic honesty constitute academic misconduct. These breaches include: plagiarism, fabrication of data, recycling previously submitted material, engaging someone else to complete an assessment on one's behalf and misconduct during supervised assessments.

The penalties for academic misconduct may include: a mark of zero on the assessment; a fail grade in the unit of study, additional assessment (including an unseen exam), and reference of the matter to the University Registrar. All assessments will be checked for plagiarism. Where plagiarism is suspected, the assessment will be fully checked and monitored using manual process, Google checks and also electronic plagiarism detectors. In order to do this, the Business School may reproduce the assessment, provide a copy to another member of the Business School, and/or communicate a copy of this assignment to a plagiarism checking service (which may then retain a copy of the assignment on its database for the purpose of future plagiarism checking).

Academic dishonesty involves more than just copying material. Cooperation and helping other students may at times trigger academic dishonesty proceedings if it appears you have worked too closely with another student.

In this unit,

1. The report is an individual assignment.
2. The readiness assurance tests include individual and group components. You must answer on your own in the individual tests, but you are encouraged to discuss answers actively with your group members in the group tests.

3. The team scenarios are group assignments. There is an individual assessment component, but this component centres on your contribution to the group, so discussion with group members is vital.
4. The group project is a group assignment with a primarily individual assessment. The group component centres on synthesising information across group members and identifying relevant concepts as a group, so discussion with group members is vital.

Individual assignments must be written and prepared alone. You may consult with other students about ideas and possible research sources but the analysis and writing of the assignment must be done alone. Group assignments should be prepared within the group. Students should contribute fully to the group and take part in all group activities, contributing ideas, analysis and writing to the final product. While students within the group should assist each other freely, students should not carry this level of cooperation outside the group. One group may cooperate and help another group about ideas and possible research sources but the analysis and writing of the assignment must be done by the group alone.

4. Texts and other resources

The textbook for this subject is:

Sussman, J. 2000, *Introduction to transportation systems*, Artech House, Boston.

[This is available for purchase at ITLS; please see the unit Blackboard site for details.](#)

5. University and Business School policies and support

5.1. Business School policies

Business School policies are contained in the Administration Manual for Students:

sydney.edu.au/business/currentstudents/student_information/student_administration_manual.

It is crucial that you take the time to consult this manual early in your studies in order to familiarise yourself with policies and procedures relating to critical issues such as the Business School's policy on special consideration (including requirements and timelines. e.g. lodging applications five working days after a missed assessment), appeals (lodge within 15 working days of the decision) and other policies such as enrolment, credit etc. Assistance is available from the Business School's Student Information Office (sydney.edu.au/business/student_information_office).

5.2. University policies

- **University policies:** sydney.edu.au/policy
- **Assistance** is available from the University's Student Centre: sydney.edu.au/current_students/student_administration
- **The code of conduct** is an important policy which outlines the University's expectations about treating all staff employees and students with respect, dignity, impartiality, courtesy and sensitivity and refrain from acts of discrimination, harassment or bullying: sydney.edu.au/ab/policies/Student_code_conduct.pdf

5.3. Student resources and services

Links to other student services and resources are included on Blackboard and on the learning and teaching section of the Business School website: sydney.edu.au/business/learning

6. Continual improvement of the Unit

6.1 Past Feedback

Previous feedback centred on assessment weights, timing and expectations. As a result of this feedback, the balance across assessment tasks and their links to learning outcomes has improved significantly.

6.2 Improvements made

The course content has been amended to streamline the connection between assigned readings, lecture material and in-class assessment. The role of peer assessment has been changed, with the class assessments placing a greater focus on individual contributions within cases of group

assessment. Additionally, a greater focus has been placed on linking theoretical concepts from the class text to real-world examples.

6.3. How feedback will be collected

Your feedback on this unit of study will be collected via a Unit of Study Evaluation (USE) during the final lecture.

7. Topic schedule

Topic	Date	Topic	Required Reading (See Section 4)	Assessments Due (See Section 3)
1	29 July 2011	Introduction and Transport as a Complex Socio-Technical System	Sussman pp. 1-9	
2	29 July 2011	Transport Systems Components and Key Concepts	Sussman pp. 11-31, 59-113	
3	12 August	Transport Modelling and Travel Demand	Sussman pp. 115-146	Readiness Assurance Test #1
4	12 August	Urban Transport and Traveller Level of Service	Sussman pp. 33-48	Group Scenario #1
5	26 August	Urban Public Transport	Sussman pp. 373-440	Readiness Assurance Test #2 Group Scenario #2
-	16 September			Report Due
6	23 September	Logistics and Rail Operations	Sussman pp. 147-197, 215-224	Readiness Assurance Test #3 Group Scenario #3
7	07 October	Rail, Road Freight and Ocean Shipping	Sussman pp. 239-275 and 317-333	Readiness Assurance Test #4 Group Scenario #4
8	21 October	Urban Transport Planning Process and Class Review	Sussman pp. 335-371	Readiness Assurance Test #5 Group Scenario #5
-	24 October			Team Project Due