



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/>



TPTM6440

International Freight Transportation Summer Semester, 2012

Unit of study outline

Unit Coordinator: Frederic Horst

Phone: (02) 9351 0103

Email: frederic.horst@sydney.edu.au

Consultation times: By appointment.

Please use email as your first method of communication.

Classes

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

Venue: LT1, Level 3, ITLS Building, 144 Burren Street, Newtown

Class	1	2	3	4	5	6
Day	Friday	Friday	Friday	Friday	Friday	Friday
Date	13 January, 2012	20 January	27 January	03 February	10 February	17 February

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 seeks to give students an understanding of the dynamics of the express, air freight and shipping business. The course will discuss underlying drivers of international trade flows and the demand for capacity in different freight transport modes, as well as industry structure, regulatory environment and market access. Building on this background the course will highlight the implications for profitable air cargo and shipping operations. Particular focus will be given to fleet and network planning, revenue and cost management. The material covered in the course will take into account recent developments in global and regional economic activity and discuss implications for the various sectors of the air and sea freight businesses.

1.2. Pre-requisite units

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

1.3. Assumed knowledge and/or skills

Work experience in or familiarity with the airline, airfreight, express or shipping business, as well as an understanding of international trade and economics is helpful.

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

TPTM6440 Intended Learning Outcomes	University of Sydney Graduate Attributes	TPTM6440 Student Learning Activities	Assessment Tasks and Assessment Criteria		
This unit aims to assist students to develop proficiencies in relation the following learning outcomes			Take Home Exam 30%	Individual Assignment 40%	Group Assignment 30%
<ol style="list-style-type: none"> Through class discussion and participation, students will be better equipped to think more critically about issues, related and unrelated, to the course topics covered. Students will develop an understanding of the effects of political, economic, legal, commercial and business issues on the demand for freight transportation capacity and the management of shipping lines and air cargo carriers. The assignments in the course are designed to test how students apply these issues to solving real business problems specific to the air cargo and shipping business. Furthermore, students will understand the links, between strategic, tactical and operational perspectives in problem solving and decision making in internationally operating transport businesses. 	<p>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.</p>	<p>Read assigned material</p> <p>Attend all lectures and group presentation sessions</p> <p>Undertake thorough research using academic and other credible industry related sources to build and support arguments in your written work</p> <p>Review your own notes before and after each lecture</p> <p>Participate in online discussion as well as discussion in class</p> <p>Understand assessment criteria</p>	<p>Apply the concepts you have learned from the lectures and the assigned readings</p> <p>Find, identify and discuss evidence relating to the questions</p> <p>Apply theory towards practical solutions and make insightful recommendations</p>	<p>Apply the concepts you have learned from the lectures and the assigned readings</p> <p>Find, identify and discuss evidence relating to the questions</p> <p>Apply theory towards practical solutions and make insightful recommendations</p>	<p>Apply the concepts you have learned from the lectures and the assigned readings</p> <p>Find, identify and discuss evidence relating to the questions</p> <p>Apply theory towards practical solutions and make insightful recommendations</p> <p>Utilize the size of the group to divide up research tasks and guarantee of a critical appraisal of the evidence and material gathered</p>

TPTM6440 UNIT OF STUDY OUTLINE

TPTM6440 Intended Learning Outcomes	University of Sydney Graduate Attributes	TPTM6440 Student Learning Activities	Assessment Tasks and Assessment Criteria		
<p>3. After analysing and discussing the different factors that drive the transport business, students will recognize that complexity and range of different outcomes lead to a number of probable solutions for the problems affect the industry.</p> <p>4. Moreover, students will be equipped with the tools and understanding of the business to analyse the impact of current and future trends affecting the air cargo and shipping business.</p>					
<p>5. Students will gain an appreciation of the kind of data and information that can be used in deriving more informed solutions to business issues faced by asset based transportation providers, as well as being aware of the problems involved with most datasets.</p> <p>6. Through research in archives, libraries, the web and other sources including in-house company materials, students will be encouraged to discover and realize the full potential offered by different data sources.</p>	<p>Information Literacy: Graduates of the Faculty of Economics and Business will be able to use information effectively in a range of contexts.</p>	<p>Access materials provided online for class</p> <p>Undertake own research and develop own information sources</p> <p>Evaluate the usefulness of information found</p>	<p>Ability to research and apply relevant concepts</p> <p>Appropriate use of sources from outside the scope of course reading</p>	<p>Ability to research and apply relevant concepts</p> <p>Appropriate use of sources from outside the scope of course reading</p>	<p>Ability to research and apply relevant concepts</p> <p>Appropriate use of sources from outside the scope of course reading</p>

TPTM6440 UNIT OF STUDY OUTLINE

TPTM6440 Intended Learning Outcomes	University of Sydney Graduate Attributes	TPTM6440 Student Learning Activities	Assessment Tasks and Assessment Criteria		
<p>7. Confidently and coherently communicate, orally and in writing, to a professional standard</p> <p>8. Develop Coherent arguments when recommending solutions and critically evaluating theories.</p> <p>9. Demonstrate skills working in teams</p>	<p>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.</p>	<p>Participate in class exercise discussions</p> <p>Write clear and concise reports</p> <p>Plan and rehearse the oral group presentation</p> <p>Draft/edit/finalize the individual and group assignments.</p>	<p>Communicate the correct answers in an efficient matter</p> <p>Provide a coherent argument with supporting evidence</p>	<p>Communicate the correct answers in an efficient matter</p> <p>Provide a coherent argument with supporting evidence</p>	<p>Communicate the correct answers in an efficient matter</p> <p>Provide a coherent argument with supporting evidence</p> <p>Use of PowerPoint to design an effective graphical aid to your presentation</p>
<p>10. Demonstrate a capacity to work independently including the ability to plan and achieve goals</p>	<p>Personal and Intellectual Autonomy: Graduates of the Faculty of Economics and Business will be able to work independently and sustainably, in a way that is informed by openness, curiosity and a desire to meet new challenges.</p>	<p>Read assigned material</p> <p>Attend all lectures</p> <p>Review your own notes before and after each lecture</p> <p>Undertake adequate preparation for assessments</p> <p>Follow up assessment outcomes with the lecturer</p> <p>Submit all assessments by the due date</p>	<p>Devote adequate time and attending to preparing and presenting your answers</p> <p>Submit the exam on time</p>	<p>Devote adequate time and attending to preparing and presenting your answers</p> <p>Submit the assessment on time</p>	<p>Devote adequate time and attending to preparing and presenting your answers</p> <p>Submit the assessment on time</p> <p>Participate actively in the group presentation and discussion</p>



3. Assessment

Assessment items	Relevant unit learning outcome/s	Word length	Weight	Due Date*
1. Take Home Exam			30%	Thu, 26/1/12
2. Individual Assignment		4000 words	40%	Thu, 16/2/12
3. Group Assignment		8000 words	30%	Thu, 23/2/12
Academic honesty module **		N/A	0%	20 January 2012

* 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% before 20 February 2012, 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 eLearning Support first on 903 66433 or business.elearning@sydney.edu.au or the Unit Coordinator as soon as possible.

3.1. Detailed assessment information

1. A **Take Home Exam** worth 30 percent of the total marks for this unit is due at 5.00pm on Monday 23 January.

After some of the lectures have been completed, students will be asked to complete an individual take home exam with approximately 10 questions relating to key concepts addressed in class. The questions will require students to find some examples or implications of certain industry characteristics or drivers.

Clarity, relevance and brevity will be important criteria when marking the take home exam. Students are advised to write no more than half a page of text in their own words (excluding illustrations for each of the questions asked). Moreover, students will be expected to find supporting examples from outside the course.

As opposed to the individual and group assignments, formal referencing according to the Harvard referencing system is not required, but students should indicate the source of any figures or tables they use. Assignments are to be submitted electronically as a single Microsoft Word file via turnitin. For learning purposes, previous years' take home exams will be made available on the blackboard online learning system.

2. An **Individual Assignment** worth 30 percent of the total marks for this unit is due at 5.00pm on Monday 20 February.

In the individual assignment, the student will be asked to prepare a report related to international trade, regulation of the air cargo or shipping business, fleet planning, network management, revenue management, cost management, or some other aspect of the air cargo or shipping business. Students can choose from a list of possible topics to be provided by the lecturer.

In this assignment, students are encouraged to choose a topic relevant to past work, university experience, or field of interest. Students are urged to discuss proposed content with the lecturer prior to commencing with the assignment. The aim of this assessment is to analyse a

specific subject in more detail than it was covered in the course. Although there is no specific requirement as to the length of the assignment, 10-15 pages at a spacing of 1.5 (not including references, title page and table of contents) should be appropriate.

Assignments are to be submitted electronically as a single Microsoft word file via turnitin. Corrected assignments with comments and completed marking criteria will be emailed back to students.

3. A **Group Assignment** worth 30 percent of the total marks for this unit is due at 5.00pm on Friday 24 February.

In the group assignment, students will be asked to analyse an airline, express carrier or shipping line. Where appropriate, the essay should address topics discussed in Part V and VI of the course. The assignment should also include a financial analysis of past company results, paying particular attention to profitability, cash flow and balance sheet structure.

The company chosen will depend on individual group members' backgrounds, but should either be a shipping line, airline with significant cargo operations, or other company that owns or operates transportation assets. Students should not choose a freight forwarder or logistics provider, as these are not within the scope of the course.

Students will be asked to form groups of 4-6 before the 3rd day of the course. To facilitate communication with the lecturer, it is asked that each group nominates a group coordinator or leader. Although there is no specific requirement as to the length of the assignment, 20-25 pages (not including references, title page and table of contents) should be appropriate. So as to make sure the content meets course requirements, students are asked to discuss proposed outline and analysis with the lecturer prior to commencing with the assignment.

On Day 6 of the course each group will be requested to give a short 10-15 minute slide presentation on preliminary findings.

Assignments are to be submitted electronically as a single Microsoft Word file via the blackboard. Only one group member needs to submit the assignment. Corrected assignments with comments and completed marking criteria will be emailed back to students.

Please note that peer assessment may be used in determining the grade that each individual student receives for this assignment.

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. 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 by telephone. 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, all assessment is to be completed individually with the exception of the group assignment.

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

Blackboard

Lecture slides, transport links and other materials relating to the course will be made available via the blackboard Online Learning System <http://blackboard.econ.usyd.edu.au/>. Students are encouraged to make ample use of the opportunities available to post questions, discuss topics or post material relating to the course.

Required Text

None, a copy of the slides will be provided by the lecturer

Recommended Reading

Boeing World Air Cargo Forecast (2010/2011), from: www.boeing.com.

Morrell, Peter (2011) Moving Boxes By Air: The Economics of International Air Cargo, Ashgate. An ebook is available under <http://opac.library.usyd.edu.au/record=b3915820~S4>

Stopford, Martin (2009), *Maritime Economics*, 3rd Edition, Routledge. An ebook is available under <http://opac.library.usyd.edu.au/record=b3915892~S4>

UNCTAD (2011) *Review of Maritime Transport*, United Nations Council on Trade and Development, from: www.unctad.org [Previous years' copies also available on that website. UNCTAD publishes a new version every year in November or December]

Clancy, Brian; Hoppin, David; Blancas, Luis; Holohan, Richard; Zhang, Clement (2007) Behind the Numbers - Understanding the underlying drivers of containerized air and sea trade, *American Shipper*, June 2007, from www.mergeglobal.com

References

While there are no required texts, some of the sources listed below may be useful for the student who wishes to delve deeper into the material discussed. To help the student prioritize his or her reading, the material deemed as particularly useful has been highlighted with an asterisk (*). This list will be updated before the course commences. Students should also check items that have been placed in the special reserve for TPTM6440.

Books

Alderton, Patrick m (2011) *Reeds Sea Transport, Operation and Economics*, 6th Edition, Adlard Coles Nautical, London

Allaz, Camille (2004) *The History of Air Cargo and Air Mail*, Christopher Foyle Publishing
[http://books.google.com.au/books?id=fPLm9omt_YIC&lpg=PP1&dq=history%20of%20air%20cargo&pg=PP1#v=onepage&q&f=false]

* Baumohl, Bernard (2007) *The Secrets of Economic Indicators*, 2nd Edition Wharton School Publishing
[<http://books.google.com.au/books?id=wj79gd3m8cUC&lpg=PP1&dq=secrets%20of%20economic%20indicators&pg=PP1#v=onepage&q&f=false>]

Besanko, David et al (2006) *Economics of Strategy*, 4th Edition, Wiley

Belobaba, Peter; Odoni, Amedeo; Barnhart, Cynthia (2009) *The Global Airline Industry*, Wiley

Brakman, Steven; Garretsen, Harry; Van Marrewijk, Charles; Van Witteloostuijn, Arjen (2006) *Nations and Firms in the Global Economy: An Introduction to International Economics and Business*, Cambridge University Press

* Branch, Alan E (2007) *Elements of Shipping*, 8th Edition, Routledge [see also
http://books.google.com.au/books?id=NxyWeT2e0xwC&lpg=PP1&ots=Vdj_NU6NY8&dq=branch%20elements%20of%20shipping&pg=PP1#v=onepage&q&f=false]

Buckley , James J. (2008), *The Business of Shipping*, 8th Edition, Cornell Maritime

* Clark, Paul (2007) *Buying the Big Jets – Fleet Planning for Airlines*, 2nd Edition, Ashgate
[<http://books.google.com.au/books?id=AY2Ad3aUWmUC&lpg=PP1&dq=buying%20the%20big%20jets&pg=PP1#v=onepage&q&f=false>]

Cox, Simon (2006) *Economics: Making Sense of the Modern Economy*, 2nd Edition, Bloomberg Press
[<http://books.google.com.au/books?id=idITtJgzj0C&lpg=PP1&dq=simon%20cox%20economics&pg=PP1#v=onepage&q&f=false>]

Cudahy, Brian J (2006) *Box Boats – How Container Ships Changed the World*, Fordham University Press
[<http://books.google.com.au/books?id=42zZ6NrwMjEC&lpg=PP1&dq=Box%20Boats%20%E2%80%93%20How%20Container%20Ships%20Changed%20the%20World&pg=PP1#v=onepage&q&f=false>]

*Dicken, Peter (2007) *Global Shift - Mapping the changing contours of the world economy*
[<http://books.google.com.au/books?id=ucdZiLVZlpAC&lpg=PP1&dq=Global%20Shift%20->

[%20Mapping%20the%20changing%20contours%20of%20the%20world%20economy&pg=PP1#v=onepage&q&f=false\]](#)

*Doganis, Rigas (2010) *Flying Off Course: Airline Economics and Marketing*, 4th Edition, Routledge [available as an ebook via the University of Sydney Library]

The Economist (2007) *Guide to Economic Indicators: Making Sense of Economics*, 6th Edition, Bloomberg Press [<http://books.google.com.au/books?id=pM1t-2wJACoC&lpg=PP1&dq=Guide%20to%20Economic%20Indicators%3A%20Making%20Sense%20of%20Economics&pg=PP1#v=onepage&q&f=false>]

Hellermann, Rolf (2006) *Capacity Options for Revenue Management: Theory and Applications in the Air Cargo Industry* (Lecture Notes in Economics & Mathematical Systems), Springer

Hopkins, George (1998) *The Airline Pilots – A Study in Elite Unionization*, Harvard University Press

ISL (2008) *Handbook of Container Shipping Management : Vol. 2: Management Issues in Container Shipping*.

ISL (2006) *Handbook of Container Shipping Management* (ISL Book Series No 32) – Volume 1: The Container Market – Supply/Demand Patterns, Chapters 1,3,5,8 have particular relevance to the course.

Kassim, Hussein; Stevens, Handley (2010) *Air Transport and the European Union*, Palgrave [<http://opac.library.usyd.edu.au/record=b3734903~S4>]

Leach, Robert (2004) *The Investors Guide to Understanding Accounts*, Harriman House [<http://books.google.com.au/books?id=eFZtcNMnZzwC&lpg=PP1&dq=Investors%20Guide%20to%20Understanding%20Accounts&pg=PP1#v=onepage&q=Investors%20Guide%20to%20Understanding%20Accounts&f=false>]

* Levinson, Marc (2006) *The Box – How the Shipping Container Made the World Smaller and World Economy Bigger*, Princeton University Press

Lewis, Howard T; Culliton, James W; Steele, Jack D (1956) *The Role of Airfreight in Physical Distribution*, Harvard University Press

Lorange, Peter (2005) *Shipping Company Strategies: Global Management Under Turbulent Conditions*, Elsevier

Van Marrewijk, Charles (2002) *International Trade and The World Economy*, 1st Edition, Oxford

* Vasigh, Bijan; Fleming, Ken; Mackay, Liam (2010) *Foundations of Airline Finance*, Ashgate [<http://opac.library.usyd.edu.au/record=b3800345~S4>]

Morrell, Peter (2011) *Moving Boxes By Air: The Economics of International Air Cargo*, Ashgate. An ebook is available under <http://opac.library.usyd.edu.au/record=b3915820~S4>

Morrell, Peter S (2007) *Airline Finance*, 3rd Edition, Ashgate [<http://books.google.com.au/books?id=Isr0GFcltdYC&lpg=PP1&dq=airline%20finance&pg=PP1#v=onepage&q&f=false>]

Niemira, Michael P, Klein, Philip A (1994) *Forecasting Financial and Economic Cycles*, John Wiley & Sons

Pilarski, Adam (2007) *Why Can't We Make Money in Aviation?* Ashgate [<http://books.google.com.au/books?id=RBsM79Te0PIC&lpg=PP1&dq=Why%20Can%E2%80%99t%20We%20Make%20Money%20in%20Aviation&pg=PP1#v=onepage&q&f=false>]

Pomeranz, Kenneth; Topik, Steven (2005) *The World that Trade Created*, 2nd Edition, M.E. Sharpe [<http://books.google.com.au/books?id=JiB9G2TiftlC&lpg=PP1&dq=The%20world%20that%20trade%20created&pg=PP1#v=onepage&q&f=false>]

* Rivoli, Pietra (2005) *The Travels of a T-Shirt in the Global Economy – An Economist Examines Markets, Power and Politics of World Trade*, John Wiley & Sons. Paperback edition appeared in 2006. [<http://books.google.com.au/books?id=DsaPcqQg93UC&lpg=PP1&dq=The%20Travels%20of%20a%20T-Shirt%20in%20the%20Global&pg=PP1#v=onepage&q&f=false>]

Radnoti, George, S. Carr (2002) *Profit Strategies for Air Transportation*, 1st Edition, Mc-graw-Hill Professional [<http://books.google.com.au/books?id=i6QedXz9V5cC&lpg=PP1&dq=profit%20strategies%20for%20air%20transportation&pg=PP1#v=onepage&q&f=false>]

* Rodrigue, Jean-Paul; Comtois, Claude; Slack, Brian (2009) *The Geography of Transport Systems*, 2nd Edition, Routledge, data and supplementary material can be downloaded from <http://people.hofstra.edu/geotrans/index.html>

* Smith, Peter (1974) *Airfreight – Operations, Economics & Marketing*, Faber

* Stopford, Martin (2009) *Maritime Economics*, 3rd Edition, Routledge. An ebook is available under <http://opac.library.usyd.edu.au/record=b3915892~S4>

Von den Steinen, Erwin (2006), *National Interest and International Aviation*, Kluwer Law International [see also <http://books.google.com.au/books?id=tfsC6RUDn2QC&lpg=PP1&pg=PP1#v=onepage&q&f=false>]

Vause, Bob (2009) *Guide to Analysing Companies*, 5th Edition, Profile Books [<http://books.google.com.au/books?id=Hoyxm2Vew90C&lpg=PP1&dq=Guide%20to%20Analysing%20Companies%20vause&pg=PP1#v=onepage&q&f=false>]

Wensveen, John G.; Wells, Alexander T. (2007) *Air Transportation: A Management Perspective*, 6th Edition, Ashgate [<http://books.google.com.au/books?id=Ej8Qsl1nfsC&lpg=PP1&dq=Air%20Transportation%3A%20A%20Management%20Perspective&pg=PP1#v=onepage&q&f=false>]

Wu, Cheng-Lung (2010) *Airline Operations and Delay Management*, Ashgate [<http://books.google.com.au/books?id=g5X4wBY4yt4C&lpg=PA3&dq=Airline%20Route%20planning&pg=PP1#v=onepage&q=Airline%20Route%20planning&f=false>]

Articles and Reports

Airbus (2011), *Global Market Forecast*, from www.airbus.com. Airbus has promised to publish a separate freight forecast, but has not done so in the past. Previous year's editions of the *Global Market Forecast* contained a small freight chapter.

Altman, Edward (2010) *The Z-Metrics™ Methodology For Estimating Company Credit Ratings And Default Risk Probabilities*, Riskmetrics Group, March 2010-09-01

ATA (2007) *Airline Handbook*, from <http://www.airlines.org/ATAResources/Handbook/Pages/AirlineHandbookChapter1BriefHistoryofAviation.aspx>

* Boeing World Air Cargo Forecast (2010/2010), from: www.boeing.com. Published every two years.

Boeing (2001) *The Basics of Maintenance Cost Forecasting*, Brochure from Boeing Commercial Airports, Airline Economic Analysis Group

Boeing (1977) *Evaluation Passenger and Cargo Profits in a Combi Operation*, Sales and Marketing Department – Boeing Airplane Company, December

BITRE (2011) *Australian Sea Freight 2009-10*, Bureau of Infrastructure, Transport and Regional Economics, September 2011, from www.btre.gov.au

BITRE (2011) *Australian Infrastructure Statistics Yearbook 2011*, March 2011, from www.btre.gov.au

BITRE (2010) *Australian maritime activity to 2029–30*, April 2010, Statistical Report, from www.BTRE.gov.au

Economist (2011) The World In 2012, The Economist. Report, which examines global and regional economic trends, is published annually around November. [See also www.economist.com/theworldin]

Hoppin, David; Clancy, Brian (2006) The Case for Caution – Why There May be a Structural Slowdown in Global Trade Growth, *American Shipper*, June 2006

* IATA Economics Briefing - <http://www.iata.org/whatwedo/economics/Pages/index.aspx>, Site contains a number of useful briefings on various airline economics related issues

- Financial Forecast, Sep 2011 (Outlook for 2011 and 2012), see <http://www.iata.org/whatwedo/Documents/economics/Industry-Outlook-September2011.pdf>
- Cargo Market Analysis, Q3 2011 (Quarterly Compendium on Airfreight market developments and outlook), see <http://www.iata.org/whatwedo/Documents/economics/eChartbook-Q3-2011.pdf>
- Business Confidence Survey, Oct 2011, http://www.iata.org/whatwedo/Documents/economics/BCS_Oct_11.pdf
- Impact of Japan Earthquake, March 2011, http://www.iata.org/whatwedo/Documents/economics/IATA_Economic_Briefing_Japan_Earthquake_March_2011.pdf
- Airfreight and World Trade, April 2009, see http://www.iata.org/whatwedo/Documents/economics/Air_freight_and_world_trade.pdf

ITF (2011) Transport Outlook – Meeting the Needs of 9 Billion People, International Transport Forum [accessed 1/12/2011 <http://www.internationaltransportforum.org/Pub/pdf/11Outlook.pdf>]

ITF (2011) Trends in Transport 2011, International Transport Forum. Available via the OECD library which can be accessed through the University of Sydney Library electronic subscriptions <http://ezproxy.library.usyd.edu.au/login?url=http://www.oecd-ilibrary.org>

ICAO (2010) Overview of Trends and Developments in International Air Transport, ICAO Secretariat, 1/9/2010 [accessed 21/10/2010 http://www.icao.int/icao/en/assembly/A37/Docs/overview_en.pdf]. Normally ICAO publishes an update twice per year, but no updates were made in 2011.

ICAO (2010) Global Quantitative Indicators For Evaluating the Degree of Liberalization, 1/9/2010 [accessed 21/10/2010 www.icao.int]

Intervistas (2009) Various Reports on the Impact of Air Services Liberalisation in Brazil, Chile, India, Mauritius, Morocco, Peru, Singapore, Turkey, UAE, Uruguay, and Vietnam. From: www.intervistas.com (links can also be found on the IATA economics website)

Intervistas (2006) The Economic Impact of Air Service Liberalization, http://www.intervistas.com/4/reports/2006-06-07_EconomicImpactOfAirServiceLiberalization_FinalReport.pdf

Salisbury, Marsha (2011) Top 100 Importers and Exporters, *Journal of Commercial*, 30th May 2011 [can be accessed either via the JoC website or through proquest]

Kasarda, John D.; Appold, Stephen J.; Mori, Makoto (2006) The Impact of the Air Cargo Industry on the Global Economy, September 13, 2006, Conference Paper at The Air Cargo Forum in Calgary, Canada, from www.tiaca.org

* Knibb, David (2010) Liberalisation: Breaking the Bilateral Web, *Airline Business*; May2010, Vol. 26 Issue 5, p32-37 [Talks about the current state of airline liberalization initiatives]

LCAG (2004) The Art of Forecasting, MergeGlobal: The Challenge of Accurately Quantifying and forecasting global airfreight demand, *Planet Magazine*, Lufthansa Cargo

UNCTAD (2011) World Investment Report, July 2011, from: www.unctad.org/wir [Previous years' copies also available on that website]

* UNCTAD (2011) Review of Maritime Transport, United Nations Council on Trade and Development, from: www.unctad.org [Previous years' copies also available on that website.]

* WTO (2011) World Trade Report, from: www.wto.org. Previous years editions downloadable for the WTO website.

WTO (2005) World Trade Report, Contains a special section on International Trade in Air Transport

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 Improvements made

Several changes have been incorporated into this semester to improve the student learning experience. Among other things,

- The material has been significantly revised and updated to include the latest industry data available, as well as the developments world economic, trade and transport activity that took place in 2009, 2010 and 2011.
- The list of student resources and links has been updated to reflect the most up to date material available
- Assignment topics have been updated

6.2 How feedback will be collected

Your feedback on this unit of study will be collected via an online Unit of Study Evaluation (USE) available during the final weeks of class. Students are also encouraged to provide feedback directly to the teaching staff.

7. Topic schedule

7.1 Summary

Day 1	Part I – Introduction – The World Economy, Air and Seafreight Markets, Aircraft and Ships
Day 2	Part I – Introduction – The World Economy, Air and Seafreight Markets, Aircraft and Ships (continued) Part II Freight Requirements, Modal Options and Mode Choice
Day 3	Part II Freight Requirements, Modal Options and Mode Choice (continued) Part III International Trade
Day 4	Part III International Trade (continued) Part IV Market Access
Day 5	Part IV Market Access (continued) Part V Industry Structure Student Presentations for Group Assignment
Day 6	Part VI Profitable Air Cargo and Shipping Operations

7.2 Detailed Topic Outline

Part I – Introduction – The World Economy, Air and Seafreight Markets, Aircraft and Ships (Day 1-2)

Part I sets the scene for the coming chapters and serves as a refresher on the structure of the world economy, as well as an introduction to the airfreight and the maritime businesses.

International freight transport and trade are closely linked and it is therefore appropriate to begin with an overview of the global economy. Where does most of the world's economic activity take place? Which countries have the highest purchasing power? Who are the main producers, consumers, exporters and importers? How important is intercontinental trade compared to intraregional and domestic activity?

What role has freight transport played in making the world smaller and more interlinked? How important are transport costs in world trade?

Intercontinental trade relies primarily on two main modes of transportation – air and sea. How much of world trade is carried by air and how much by sea? How do the different airfreight markets and shipping sectors compare? Where are the main airfreight gateways and ports located? Where are the

main inter and intraregional air and seafreight markets? What kind of products and commodities are shipped by air and sea? How have air and ocean freight grown in the past and how much future growth do forecasters expect? How do air and sea freight relate to other modes of transportation?

Bearing in mind that a large number of students will have limited experience in the freight business, this section will devote some time to illustrate the type of equipment used in transporting the bulk of the world's cargo. How much is carried in the holds of passenger aircraft compared to freighters? Which aircraft types are used to carry freight and which aircraft types will be available for future operators? We discuss similar questions on the shipping side. How has the world merchant fleet evolved? What kinds of vessels are available and how are these deployed? In this context we also discuss specialist equipment and "new" modes of transport that may have some future significance.

Most of the world's intercontinental freight traffic is carried by a relatively small number of companies. Which airlines, air cargo and express carriers and shipping lines carry the bulk of the world's freight? What are the different business models in the airfreight and maritime business that a carrier can adopt?

Last, but not least, we look at how the typical express, airfreight and seafreight shipment move from origin to destination.

For students, the *key learning objective* of this chapter should be to gain an appreciation of the importance, scale and nature of the different airfreight and shipping markets.

Part II Freight Requirements, Modal Options and Mode Choice (Day 2-3)

Air and Sea are often viewed in isolation, but there are interdependencies and competition between the demand for different modes and transportation products. Part II discusses the "requirements" of different types of freight and how these affect the demand for air and sea.

In order to develop a set of rules for understanding why a certain mode of transport (or "transportation product") is preferable over another, it makes sense to examine the product and demand characteristics of different categories of cargo. Most shipments will fall into one of four groups – supply chain cargo, perishable cargo and foods, project cargo, or contingency cargo. Shippers active in moving goods in each category will have certain demands with regard to transit times, handling, security, as well as other services. Which modal combinations or transport products can a shipper choose from and which trade offs will a shipper have to make when picking a particular modal combination?

Depending on the circumstances, the same good may travel by air or sea. How will the nature of the commodity, demand, consignment size, and value of good influence the decision? Shippers seek to minimize the total cost of production and distribution. How do inventory management and logistics philosophy affect the relative demand for air and seafreight? How sensitive are air and seafreight demand to changes in absolute and relative price levels? Specifically, what is the air-sea split of various products and commodities?

For students the *key learning objective* of this chapter will be to develop an understanding of how different product characteristics and concepts such as total distribution cost drive the choice of air over surface transportation.

Part III International Trade (Day 3-4)

Part III focuses on the key driver of freight transportation capacity - world trade. Patterns in world trade determine the type of capacity required, as well as how aircraft, ships and ground transportation are deployed.

Historically, trade has grown about twice as fast as the world economy. While there has been strong correlation between economic growth and growth in various transport markets, the relationship has not always been clear cut, which points out the need for a more in depth analysis of the underlying trade drivers and distorting factors. How is economic activity and growth measured? What do official statistics fail to capture?

What are some different business, price and consumption related indicators that can help to explain the state of the economy and give an indication of future developments relevant to the demand for freight transportation services? What is the importance of investment? What role do multinational corporations play in the world economy? How do exchange rates or oil price movements influence demand patterns? How is trade related to import prices? How have labour productivity and production cost differences, specialisation, climate, geography, and consumption patterns shaped world trade? How do protectionism, quotas or duties influence trade? What impact to Free Trade Agreements (FTAs) have?

Given regional differences and various forces acting on the world economy it is not surprising that world trade is neither balanced nor stable. How imbalanced are air and seafreight markets in terms of tonnage and value? How do seasonality, peaking and cyclical activity affect the demand for freight transportation capacity? What impact do natural disasters, weather, industrial action, wars or other unforeseen events have on the demand and movement of goods?

For students the *key learning objectives* of this chapter will be to develop an understanding for the factors that drive world trade, and, ultimately, the demand for aircraft and vessel capacity. Students will also gain an insight into how market shocks, peaking patterns, seasonality, business cycles and other long term trends and cyclical activity affect capacity requirements.

Part IV Market Access (Day 4-5)

Part IV focuses on the regulatory environment that shapes the air cargo, express and shipping business on a national and international level.

Airlines and express carriers must overcome a multitude of government imposed restrictions if they are to operate in a manner that follows market patterns. Due to the bilateral nature of international aviation relations, these restrictions will often vary significantly depending on the home country of the carrier.

So called “traffic rights” negotiated in bilateral Air Services Agreements (ASAs) lay down the rules for international air carrier operations. What are traffic rights and why are these important? What do ASAs regulate and how are these agreements concluded? How have carriers learnt to deal with and get around regulatory limitations? What has shaped the current structure of the international aviation system? What changes have taken place in past years towards more “open” skies and which barriers remain? What perspectives are there for change?

The availability of traffic rights are not the only limitations faced by air carriers. Foreign ownership restrictions, competition law and policy, security, customs, access to ground transportation, safety and environmental regulations also define a carrier’s business and operating environment. What are some of the different rules and authorities that an airline must deal with? What methods do national governments utilize to give their home carriers a competitive advantage over foreign competition? However, not all limitations are government imposed. We will also look at how constraints such as the availability of airport capacity, infrastructure and airspace affect airline operations.

Those who have been following the never ending chain of airline bankruptcy proceedings in the United States will have noticed the eminence of labour among the reasons given for the need for restructuring. We will examine some examples of how pilot labour and clauses in collective bargaining agreements have placed severe limitations on the strategic, investment and operational decisions that airlines can make. It is therefore appropriate to discuss labour in the context of market access.

How does the maritime business compare? What kind of regulatory framework to shipping companies have to take into account? What role do national countries and different institutions play in the shipping business? How can companies use the regulatory structure to gain competitive advantage? How does congestion in main waterways and ports affect maritime operations?

For students the *key learning objectives* of this chapter will be to understand the political, commercial and operational limitations faced by shipping lines and particularly by airlines when operating in international markets.

Part V Industry Structure (Day 5)

Part V looks at an array of structural characteristics of the air cargo and shipping industry, while highlighting how well carriers and shipping lines have performed financially.

How profitable are the different airlines, integrators and shipping lines? How does the profitability of asset-based transportation providers compare with other players in the transport business as well other industries in general? How creditworthy are airlines, integrators, shipping lines and logistics providers? Why is it hard to get an understanding of the true profitability of the transport business and companies operating within various air and sea sectors?

As with the factors that drive international trade, the factors that influence the profitability of airfreight and container shipping are equally complex

- *Yields, Surcharges and Revenues:* How have market yields in the express, airfreight and shipping business developed over time? What role do different surcharges for fuel, war risk, and currency fluctuations play? Revenues and cash inflows (and outflows) are unevenly distributed throughout the year. What are the implications of this?
- *Concentration, Consolidation and Competition:* How concentrated is the airfreight and container shipping business? How has this changed over time? Have market access limitations had an effect on competition within the business?
- *World Fleet, Capacity utilisation, Future Orders:* What is the composition and age profile of the world's freighter and vessel fleet? Does the industry suffer from overcapacity? How well do operators utilize their ships and aircraft? How have recent economic developments affected fleet composition, capacity utilization and the order-book for new capacity? How is the capacity situation likely to change in the short, medium and long term?
- *Capital intensity and Asset Life:* What kind of initial and ongoing investment is required to acquire a ship or aircraft? How do the prices for new compare with used aircraft and vessels? What limits the economic and technical life of aircraft and ships? What implications does this have for fleet planning?
- *Cyclical:* As with the world economy, the airfreight and shipping industries go through their own cycles. Why? What implications does the time lag between order and delivery of aircraft and ships have in this context?
- *Cost structure:* what are the main cost drivers in an airline or shipping line? How do these costs change over time? What are the significance of items such as capital, maintenance, fuel and labour costs? How can these be influenced? How does the cost structure vary between airlines, air cargo carriers, shipping lines and integrated operators?
- *Currency risks:* By nature, airlines and shipping lines operate in a multicurrency environment. What are the implications of currency fluctuations on costs and revenues?
- *Customer base and revenue risks:* As a business-to-business market, how is freight different to normal business-to-consumer markets (such as the passenger business)? Airlines and shipping lines deal with a number of different customers, including individual shippers, multinational corporations, freight forwarders, logistics providers, as well as other carriers. What is the significance of each one of these customer segments? In many cases there is a rift between the length of customer commitment and investment that carriers are required to make to provide adequate capacity. Do different segments in the cargo business enjoy higher revenue quality than other sectors?

Key Learning Objectives

This part should equip students with the necessary knowledge to be able to understand the structural and industry specific elements that influence profit levels, creditworthiness and the risk profile of an airline or shipping line.

Part VI Profitable Air Cargo and Shipping Operations (Day 6)

Part VI discusses the critical success factors in running profitable air cargo and shipping operations. Particular focus is given to revenue, cost management, fleet and network planning. We will discuss some of the typical decisions that need to be made in each one of these areas. A large part of this section builds up on the topics covered in the previous chapters. This chapter draws mainly on examples from the air cargo business.

Revenue and Capacity Management

The revenue manager's role will be to get the highest contribution out of each roundtrip, while at the same time guaranteeing a steady and predictable revenue stream throughout the course of the year. What role does pricing play in this context? Do short term prices affect long term prices? Can a carrier influence the market price? What other tools apart from pricing can the revenue manager use to achieve his or her objective?

Network Management

While the revenue manager is responsible for the most efficient use of existing capacity, the network manager is responsible for the most profitable deployment of flying or sailing assets. His or her role is to build and maintain a network that assembles a mix of markets that lead to an agreed level of profitability, generates predictable revenues, load factors, highest possible asset utilization and is resistant to crisis as well as demand fluctuations. The network manager determines equipment routing as well as publishing and managing the schedule.

There is no one-fits all solution in planning and managing a network, but each decision involves a set of trade-offs between various options. On which routes should aircraft and ships be deployed? Should a carrier build a regionally focused or global network? How often should each destination be served? What departure and arrival times are the most advantageous? How important is connectivity between flights or vessels? To what extent can and should capacity be adjusted to seasonal variations? Should flights be routed on direct, multiple stop, or round the world services, which follow trade imbalances and consolidation possibilities?

How much of the network is predetermined by other forces, such as the passenger division, business model, market access or the aircraft themselves?

Cost Allocation and Management

That revenue management, network and fleet planning decisions cannot be made without an eye for costs goes without saying. While it is fairly easy to identify all sources of cost, there is no clear-cut way to allocate costs to various activities. However, the way costs are allocated can have a strong influence on the perceived profitability of the various services a company provides.

Some costs are time-based while other costs vary with the level of activity. Why is this distinction important? How can costs be allocated to each route or sector? What is the effect of using different cost allocation methodologies? In many airlines, cargo is a by-product of the passenger business or part of a firm that produces an array of goods and services. How can costs be allocated to each division in a multiple product business? How can costs be allocated in a vertically integrated business such as an express carrier?

How do we determine whether a carrier's costs are appropriate and compare to other competitors? "Unit costs" allow us to benchmark the cost levels of various firms operating different equipment and present in different markets. What are some commonly used indicators? How do different operators compare?

Certain costs can be reduced through increased productivity, but operational pattern and business model will limit the extent to which a carrier can "sweat" its assets. How can the main cost components be influenced and do lower costs lead to disadvantages elsewhere?

The true cost of something is not only what you paid for something but also what you give up to get it. The latter is often referred to as “opportunity cost”. We will also look at the concept of opportunity costs in the transport business.

Fleet Planning

While revenue management and network planning are primarily focused on the short to medium term future, the fleet planner has a longer term responsibility for the capacity operated by an airline or shipping line. What are the steps involved in setting up a fleet plan?

Most fleet planning decisions are not as easily reversible as network or revenue management decisions, because they involve multiple year financial commitments. The results of good or bad fleet planning may only become evident many years later. Due to the long term nature of fleet planning decisions, the fleet planner must have view on future market and cost developments, as well as an appreciation of what happens when key assumptions change.

Determining the most appropriate medium to long term fleet composition will involve a number of trade-offs: Are small aircraft better than large aircraft? Is new equipment better than used equipment? Should a carrier operate a single-type fleet or several different aircraft types? Should a carrier “make” or “buy” its required capacity?

Only start-up carriers can commence with a clean sheet of paper. What role does an airline’s existing fleet in making fleet planning decisions? If an airline is part of a larger group, what role does this play? How quickly should new equipment be integrated into the fleet and old equipment phased out?

A carrier has several ways of acquiring the required equipment – straight cash purchase, 3rd party financing, leasing or “wet-leasing”. What is best? How does the standing of a carrier affect what options will be available? When will new equipment be needed and when should commitments be made? How can a carrier build flexibility to deal with variability in the economic outlook and market conditions into the fleet plan?

Aircraft Economics Comparison

In this context we will also compare the operating economics of various in-service intercontinental freighter aircraft and highlight their respective strengths and weaknesses under different productivity and cost assumptions.

Key Learning Objectives

The goal of this chapter will be to equip students with the tools and understanding to make informed decisions on the topics of revenue management, network design, cost management and fleet planning.