Course Staff

The course author and facilitator is Mr Rod Sullivan, a Senior Visiting Fellow with the Department of Aviation. Mr Sullivan can be contacted by telephone on 0408 008 474 or via e-mail at r.sullivan@unsw.edu.au. Mr Sullivan does not visit campus during University semester and is available for student consultation only by special arrangement.

Course Information

Aims

This 6 UoC course aims to assist students develop a broad understanding of the key elements of Airport Planning so that regardless of the student’s specific personal involvement in aviation, be it with an airport, an airline, air traffic service provider, aviation regulatory body, aviation consultant or interested financial institution, they can take a realistic view, when faced with a airport planning situation, of what the process can achieve and what constraints have to be taken into account.

Students will gain an insight into the complexities and wide ranging nature of the issues confronting an airport planner, the long lead times and costs involved in providing airport infrastructure. They will also develop an appreciation of the need for effective and flexible planning if an airport is to be developed to its maximum potential – providing for future aviation needs while satisfying development imperatives which will ensure its long term commercial viability.

Learning Outcomes

On completion of this course students should be able to:

1. demonstrate, by completion of two written assignments and exercises contained in the course notes, an understanding of:
   - the need for airport planning, how it is approached and what the planning is designed to achieve;
   - the basic planning constraints that have to be managed eg regulatory requirements and site limitations;
   - the most common forecasting methods and their limitations;
   - the concept of capacity and delay and the part it plays in the inter-relationship of airport subsystems;
- the purpose of the airport’s physical facilities and factors that influence their location and size;
2. conduct independent research and inquiry and apply analytical skills in finding solutions to complex and difficult issues having prepared two written research assignments relating to airport planning;
3. apply good written communication skills by presenting solutions to such complex and difficult issues in a clear and concise manner;
4. apply knowledge gained in other disciplines or life experience to resolving airport planning issues/problems;
5. demonstrate, by way of successfully completing assignments and unit exercises, a capacity for self motivated learning, intellectual development, resourcefulness and successful time management.

Location

This course runs for twelve weeks in Session Two and is part of the Master of Science and Technology in Aviation offered through distance education.

Learning and Teaching Philosophy

The course aims to be interesting, challenging and enjoyable. The assignments are linked to the real world to allow students to apply their own life experiences to a practical airport planning situation. Student diversity in terms of experiences and learning styles is valued. Student assessment is designed to reflect the learning outcomes, and meaningful and timely feedback will be provided on coursework.

Integration into Overall Program

The course relates to several other courses offered as part of the MScTech in Aviation eg Law and Regulation in Aviation, Aviation and Security and Airport Operations Management. This course focuses on the physical environment that has to be planned to allow for the safe and efficient conduct of current and future aircraft operations.

Teaching Strategies

Students have been provided with a comprehensive set of notes supported by readings, a reading list and a list of useful internet sites. The course notes include exercises for the student to complete to focus and consolidate their understanding of the concepts and requirements involved in airport planning. These are not compulsory and answers are either present in the material or involve the student in making decisions, which as in life, may prove to be right or wrong by circumstance.

The materials reflect Mr Sullivan’s long involvement in the aviation industry, specifically his experiences in airport planning, operations and the development of airport standards. The role of the course facilitator is to support and encourage students, to provide them with additional information and answer queries as required. There is however an expectation that students will take responsibility for their own
learning and time management as required for the completion of the course and timely submission of assignments.

Internet

A Blackboard 9 Module has been created to accompany this course. This will be the primary vehicle for student and facilitator interaction. Additional readings or supplementary course materials may be posted throughout the semester as necessary.

Use of this facility allows the student, learning at a distance to:

- establish a link to UNSW and create a sense of belonging;
- communicate and share relevant information and/or experiences with other students and the facilitator;
- access material as required;
- source information in the notes quickly; and
- evaluate materials before downloading and printing.

Students are encouraged to utilise the internet to establish current regulatory requirements and consider airport master plans that have been made available via the Internet.

Assessment

Types of Assessment

Assessment components relate specifically to the learning outcomes for this course and key graduate attributes expected of UNSW students. There are two forms of assessment for this course:

1. Research Assignments – There are two assignments based on a small regional airport scenario.

   The first assignment of 2000 words is due on 6 September 2010. It is worth 40%.

   It requires the student to adopt the role of an airport manager who is preparing a briefing paper in relation to the planning impacts of proposed changes to design standards applying to airside facilities.

   The second assignment of 2000 words is due on 25 October 2010. It is worth 40%.

   It requires the student to adopt the role of an airport planning consultant to prepare a report which contains forecasts of future passenger growth and provide development options in relation to the terminal building and associated landside areas in order to accommodate this growth.
Please note that the information above is an outline of the assignment topics. Full details of the topics have been posted separately on Blackboard 9.

Each assignment relates to all five learning outcomes.

Assignments must be submitted by lodgement through Blackboard 9. Submission should be confirmed by email to the lecturer. Any application for an extension of time must be made in writing prior to the due date. Late assignments, without a reason deemed satisfactory by the lecturer, may be penalised by a loss of 10% of the total possible marks for the assignment per working day. Overly long assignments may also be penalised.

2. **End of Semester Assessment (20%)** – This assessment, which may take the form of an additional assignment based on course work or a “take home” exam, will be posted on Blackboard 9 on at the beginning of the UNSW Exam Week. It is to be submitted electronically no later than the date specified by UNSW.

This assessment also relates to all five learning outcomes but with less emphasis on research.

**Assessment Criteria**

The criteria for assessment of all written work will be:

1. overall understanding of the assignment requirement, demonstrated in terms of material selected for inclusion in and development and structure of the student response;
2. appropriate weight and balance given to the components of the assignment;
3. evidence of understanding of the concepts and problems being studied or reviewed;
4. evidence of relevant independent research;
5. ability to analyse and synthesise material;
6. ability to apply solutions in the aviation field from the student's own areas of experience;
7. ability to write in a concise and simple manner whilst solving complex and difficult issues
8. appropriate style of response utilised eg – report, briefing paper, paper for presentation, a critique etc;
9. presentation of the response allows the reader easy and clear access to the material presented and an understanding of the structure of the response;
10. appropriate referencing of researched material.

In general terms the assignments will be marked on:

- coverage - criteria 1, 2 3 and 4 (40%);
- analytical skills and problem solving - criteria 5 and 6 (40%) ; and
- presentation – criteria 7, 8, 9, 10 (20%).
Academic Honesty and Plagiarism

Plagiarism is the presentation of the thoughts or work of another as one’s own. Examples include:

• direct duplication of the thoughts or work of another, including by copying work, or knowingly permitting it to be copied - this includes copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person’s assignment without appropriate acknowledgement;
• paraphrasing another person’s work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
• piecing together sections of the work of others into a new whole;
• presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and,
• claiming credit for a proportion of work contributed to a group assessment item that is greater than that actually contributed.

Submitting an assessment item that has already been submitted for academic credit elsewhere may also be considered plagiarism.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does not amount to plagiarism.

Students are reminded of their Rights and Responsibilities in respect of plagiarism, as set out in the University Postgraduate Handbook, and are encouraged to seek advice from academic staff whenever necessary to ensure they avoid plagiarism in all its forms.

The Learning Centre website is the central University online resource for staff and student information on plagiarism and academic honesty. It can be located at:

www.lc.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:
1. correct referencing practices;
2. paraphrasing, summarising, essay writing, and time management;
3. appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management.

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1 Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle.
2 Adapted with kind permission from the University of Melbourne.
Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

Course Schedule

This course is composed of an overview and 12 units to match the course duration of 12 weeks. However students are expected to manage their workloads so that relevant units are completed in conjunction with assignment topics and examination requirements. The approach to each topic involves self paced learning utilising the course notes and readings supplied and supplemented by student research.

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Resources for students

Recommended Texts

While some of the texts are not of recent vintage they are still some of the most definitive available.


A copy of the following publication has been posted on Blackboard 9 with the course notes:


Aviation Internet Sites

There are not many sites dedicated specifically to airport planning. The ones listed below may prove useful for certain units and will provide links to other sites that are worth exploring.

An all-purpose website that you are probably already familiar with which allows you to search on almost any topic is http://www.google.com.au. Google Earth will allow you to view the facilities at numerous airports. Google searches on Airport Design and Airport Planning will provide sites of interest.

A number of airports around the world now post their master plans on their websites. These provide useful examples of what the airport planning process is designed to achieve.

http://virtualskies.arc.nasa.gov/airport_design/index.html provides a short segment on Airport Design which provides a useful introduction to factors that need to be taken into account in the planning process.

Airservices Australia
http://www.airservicesaustralia.com

Aviation Statistics

Bureau of Infrastructure, Transport & Regional Economics (BITRE)
http://www.btre.gov.au

Department of Infrastructure, Transport, Regional Development & Local Government
http://www.infrastructure.gov.au

Civil Aviation Safety Authority
http://www.casa.gov.au

International Civil Aviation Organisation (ICAO)
http://www.icao.int

International Air Transport Association (IATA)
http://www.iata.org
Airport Council International (ACI)
http://www.airports.org

Federal Aviation Administration
http://www.faa.gov

Sydney Airport
http://www.sydneyairport.com.au

Brisbane Airport
http://www.bne.com.au

Essential Readings

Each study unit is accompanied by readings. While you will note that some are not recent publications, they have been included either because they provide useful/pertinent illustrations to support the study material or they are still the most definitive available.

Continual Course Improvement

Periodically, student evaluative feedback on the course is gathered, using among other means, UNSW's Course and Teaching Evaluation and Improvement (CATEI) Process. Student feedback is taken seriously, and continual improvements are made to the course based in part on such feedback. Significant changes to the course will be communicated to subsequent groups of students taking the course.

Administrative Matters

Students should be familiar with the information contained in https://my.unsw.edu.au regarding expectations of students, assignment submission, examination procedures, equity and diversity and other policies that affect you.

Rod Sullivan
May 2010