



## UNSW Course Outline

# AVIA2910 Air Transport: Economics and the Environment - 2024

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## General Course Information

Course Code : AVIA2910

Year : 2024

Term : Term 1

Teaching Period : T1

Is a multi-term course? : No

Faculty : Faculty of Science

Academic Unit : School of Aviation

Delivery Mode : In Person

Delivery Format : Standard

Delivery Location : Kensington

Campus : Sydney

Study Level : Undergraduate

Units of Credit : 6

### Useful Links

[Handbook Class Timetable](#)

## Course Details & Outcomes

### Course Description

This course is designed to develop non-economics majors' economic literacy in the understanding of the key drivers of the commercial air transport industry and the industries' impact on society. The course builds on the principles of economics to examine contemporary

and prominent issues in the aviation-environment nexus such as aircraft noise and climate change. Students will be encouraged to apply concepts and techniques learnt in class through a short field excursion and series of tutorials on basic econometrics. The course will encourage students to think about air transport from varying perspectives on sustainable development.

## **Course Aims**

The aim of this course is to assist students develop economic literacy in the aviation-environment nexus. Students are expected to gain an understanding of the key economic principles relevant to the understanding of market failure and sustainable development. Through case studies, the course aims to assist students develop awareness and understanding of aviation policy issues concerning aircraft noise and climate change, as well as techniques such as hedonic pricing method used to quantify and assess the environmental impact of aviation. While lectures focus on theories, the tutorials focus on building student skills in quantitative methods.

# Course Learning Outcomes

Course Learning Outcomes
CL01 : Explain how air transport interacts with aspects of society using neoclassical economic tools such as supply and demand.
CL02 : Recall and apply economic literacy developed in the marginalist paradigm to evaluate the economic and environmental impacts of the aviation industry.
CL03 : Apply skills in analytical numeracy to undertake causal econometric modelling such as hedonic pricing method.
CL04 : Appraise the spatial (un)evenness of the costs and benefits of air transport, and the relevance and limitations of economic methods.
CL05 : Apply market economic theory to compare and evaluate key environmental economic policy options to manage aircraft noise and aviation-induced climate change.
CL06 : Describe how air transport interacts with broader socio-economic and environmental issues in Sydney using experiences from field research.

Course Learning Outcomes	Assessment Item
CL01 : Explain how air transport interacts with aspects of society using neoclassical economic tools such as supply and demand.	<ul style="list-style-type: none"> <li>• Final examination</li> <li>• Individual report</li> </ul>
CL02 : Recall and apply economic literacy developed in the marginalist paradigm to evaluate the economic and environmental impacts of the aviation industry.	<ul style="list-style-type: none"> <li>• Final examination</li> <li>• Individual report</li> </ul>
CL03 : Apply skills in analytical numeracy to undertake causal econometric modelling such as hedonic pricing method.	<ul style="list-style-type: none"> <li>• Team assignment</li> <li>• Final examination</li> </ul>
CL04 : Appraise the spatial (un)evenness of the costs and benefits of air transport, and the relevance and limitations of economic methods.	<ul style="list-style-type: none"> <li>• Team assignment</li> <li>• Final examination</li> </ul>
CL05 : Apply market economic theory to compare and evaluate key environmental economic policy options to manage aircraft noise and aviation-induced climate change.	<ul style="list-style-type: none"> <li>• Final examination</li> </ul>
CL06 : Describe how air transport interacts with broader socio-economic and environmental issues in Sydney using experiences from field research.	<ul style="list-style-type: none"> <li>• Final examination</li> </ul>

## Learning and Teaching Technologies

Moodle - Learning Management System | Zoom | Echo 360 | Microsoft Teams

# Assessments

## Assessment Structure

Assessment Item	Weight	Relevant Dates
Team assignment Assessment Format: Group	30%	
Final examination Assessment Format: Individual	45%	
Individual report Assessment Format: Individual	25%	

## Assessment Details

### Team assignment

#### Assessment Overview

For this assessment, you will work in a group of approximately 4 students.

This assessment is comprised of three parts that you will need to complete: Part 1. Teamwork contract (5% of course grade); Part 2: Teamwork Presentation (10%); Part 3: Written Report (15%).

**Part 1. Teamwork contract.** You are first required to submit a teamwork contract due by Week 5. The contract requires you to detail your team goals, expectations, and proposed strategies to deal with non-performance. You are also expected to detail how workload will be distributed for the presentation preparation and delivery.

#### **Part 2. Teamwork presentation and Part 3. Written report**

To complete the assignment, you will need to refer to the regression results outlined in the Individual Report (Assessment 1).

As a group, you will need to consider a renting scenario based using the hedonic pricing model.

You will then need to correctly interpret the model results and use this interpretation to prepare a report and presentation that includes information addressing the questions and tasks provided in the assignment description.

#### ***Part 2. Teamwork presentation:***

Your presentation (maximum 10 minutes in duration) should summarise the interpretation of the model results relating to the questions and tasks posed in the assignment description, with an emphasis on what your group believes to be the most interesting and relevant results. The presentation is due in Week 8 in class and should reflect the workload commitment detailed in the Team Contract (Part 1).

### ***Part 3. Written report:***

Your group is required to submit a maximum 1000 word report in Week 9, which should include clearly presented answers to the assignment questions and tasks. Your group will be assessed on how well your arguments are substantiated and appropriately referenced.

In addition to the written report, you are required to submit a copy of the teamwork contract and a short statement on how workload was distributed in the written report. Please note that this statement is not included in the word limit.

Written feedback and marks will be provided within 10 working days after the submission deadline for each respective Part.

### **Course Learning Outcomes**

- CL03 : Apply skills in analytical numeracy to undertake causal econometric modelling such as hedonic pricing method.
- CL04 : Appraise the spatial (un)evenness of the costs and benefits of air transport, and the relevance and limitations of economic methods.

### **Assessment information**

Please refer to Moodle for exact submission date and time.

## **Final examination**

### **Assessment Overview**

You are required to undertake a final examination comprised of a essay and/or paragraph questions. You will be allocated 120 minutes to complete the examination and this will be held during the official UNSW examination period.

The examination will assess all content covered in the course. Feedback is available through inquiry with the course convenor.

### **Course Learning Outcomes**

- CL01 : Explain how air transport interacts with aspects of society using neoclassical

economic tools such as supply and demand.

- CLO2 : Recall and apply economic literacy developed in the marginalist paradigm to evaluate the economic and environmental impacts of the aviation industry.
- CLO3 : Apply skills in analytical numeracy to undertake causal econometric modelling such as hedonic pricing method.
- CLO4 : Appraise the spatial (un)evenness of the costs and benefits of air transport, and the relevance and limitations of economic methods.
- CLO5 : Apply market economic theory to compare and evaluate key environmental economic policy options to manage aircraft noise and aviation-induced climate change.
- CLO6 : Describe how air transport interacts with broader socio-economic and environmental issues in Sydney using experiences from field research.

### **Assessment Length**

Typically 2 hours

## **Individual report**

### **Assessment Overview**

For this assessment, you will be provided with a simulated dataset and asked to write a report addressing a set of questions related to the economic valuation of non-market goods.

The report is to be a maximum of 2 pages and comprising less than 800 words (excluding references). Details for the assignment will be released in Week 2. The report is due in Week 5 of the course.

Written feedback and marks will be provided within 10 working days after the submission deadline.

### **Course Learning Outcomes**

- CLO1 : Explain how air transport interacts with aspects of society using neoclassical economic tools such as supply and demand.
- CLO2 : Recall and apply economic literacy developed in the marginalist paradigm to evaluate the economic and environmental impacts of the aviation industry.

## **General Assessment Information**

### **UNSW Aviation's decision for Short Extension Policy**

The School of Aviation has carefully reviewed its range of assignments and projects to determine their suitability for automatic short extensions as set out by the UNSW Short Extension Policy. After careful consideration of our course offerings and our current structure, we have determined that our current deadline structures already accommodate the possibility of

unexpected circumstances that may lead students to require additional days for submission. Consequently, the School of Aviation has decided to not adopt the Short Extension provision for all its courses and has reassured that flexibility is integrated into our assessment deadlines. The decision is subject to revision in response to the introduction of new course offerings. Students may still apply for Special Consideration via the usual procedures.

**Grading Basis**

Standard

**Requirements to pass course**

Student must demonstrate a satisfactory result in the final exam to pass this course.

# Course Schedule

## Attendance Requirements

Please note that lecture recordings are not available for this course. Students are strongly encouraged to attend all classes and contact the Course Authority to make alternative arrangements for classes missed.

## General Schedule Information

**UNSW Aviation’s decision to not release Lecture Recordings:**

The School of Aviation prides itself on offering education that supports students in their personalised learning journey. This involves providing opportunities for students to engage with academics and key aviation experts to identify and address learning gaps, develop core skills and knowledge, and foster an environment of collaboration and meaningful discussion with the UNSW Aviation community. To support this vision, UNSW Aviation has decided to require students to attend all synchronous lectures (in-person or online) and not release class recordings to the student cohort. If students cannot attend a class and require learning support due to unforeseen circumstances, they should contact their Course Coordinator or Program Coordinator to discuss options for support and making up for missed class time.

# Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
	Tay Koo					No	Yes

# Other Useful Information

## Academic Information

Upon your enrolment at UNSW, you share responsibility with us for maintaining a safe, harmonious and tolerant University environment.

You are required to:

- Comply with the University's conditions of enrolment.
- Act responsibly, ethically, safely and with integrity.
- Observe standards of equity and respect in dealing with every member of the UNSW community.
- Engage in lawful behaviour.
- Use and care for University resources in a responsible and appropriate manner.
- Maintain the University's reputation and good standing.

For more information, visit the [UNSW Student Code of Conduct Website](#).

## Academic Honesty and Plagiarism

**Referencing** is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at <https://student.unsw.edu.au/referencing>

**Academic integrity** is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage. At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity, plagiarism and the use of AI in assessments can be located at:

- The [Current Students site](#),
- The [ELISE training site](#), and
- The [Use of AI for assessments](#) site.

The Student Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: <https://student.unsw.edu.au/conduct>

## Submission of Assessment Tasks

### Penalty for Late Submissions

UNSW has a standard late submission penalty of:

- 5% per day,
- for all assessments where a penalty applies,
- capped at five days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

***Any variations to the above will be explicitly stated in the Course Outline for a given course or assessment task.***

Students are expected to manage their time to meet deadlines and to request extensions as early as possible before the deadline.

### Special Consideration

If circumstances prevent you from attending/completing an assessment task, you must officially apply for special consideration, usually within 3 days of the sitting date/due date. You can apply by logging onto myUNSW and following the link in the My Student Profile Tab. Medical documentation or other documentation explaining your absence must be submitted with your application. Once your application has been assessed, you will be contacted via your student email address to be advised of the official outcome and any actions that need to be taken from there. For more information about special consideration, please visit: <https://student.unsw.edu.au/special-consideration>

**Important note:** UNSW has a “fit to sit/submit” rule, which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit to do so and cannot later apply for Special Consideration. This is to ensure that if you feel unwell or are faced with significant circumstances beyond your control that affect your ability to study, you do not sit an examination or submit an assessment that does not reflect your best performance. Instead, you should apply for Special Consideration as soon as you realise you are not well enough or are otherwise unable to sit or submit an assessment.

### Faculty-specific Information

#### Additional support for students

- [The Current Students Gateway](#)
- [Student Support](#)
- [Academic Skills and Support](#)
- [Student Wellbeing, Health and Safety](#)
- [Equitable Learning Services](#)
- [UNSW IT Service Centre](#)
- Science EDI Student [Initiatives](#), [Offerings](#) and [Guidelines](#)

## School Contact Information

### Email:

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### Telephone:

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