



Source Outline
Term 1 2020

AERO4620

**DYNAMICS OF AEROSPACE
VEHICLES AND SYSTEMS**

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1. Staff contact details

Contact details and consultation times for course convenor

Name: Dr Zoran Vulovic

Office location: Room 311D, Building J17

Tel: (02) 9385 6261

Email:

You should aim to spend about 12 h/w on this course. The additional time should be spent in making sure that you understand the lecture material, completing the set assignments, further reading, and revising for any examinations.

Contact hours

	Day	Time	Location
Lectures	Monday	15.00 – 17.00	Ainsworth 102
	Tuesday	12.00 – 15.00	CivEng G1
	Thursday	12.00 – 14.00	Ainsworth 102
Flight Simulation	By appointment	By appointment	Willis Annexe 117 (K-J18-117)
Lab	TBA	Lecture times	Willis Annexe 202 (Kens- J18-202)

Please refer to Moodle announcements to self-enrol into the flight simulation and lab session of your choice.

Summary and Aims of the course

For ease of management, the course is organised into three separate parts: Aerospace Systems, Avionics and Flight Dynamics; they will form Modules A, B and C respectively. Module A will run in Weeks 1 – 3 and Modules B and C in Weeks 4 – 10. In addition, there is an individual flight simulation exercise.

The Aerospace Systems part deals with the so-called airframe systems as well as their effect on an aircraft's performance. The Avionics segment studies aircraft electronic systems as well as other systems that directly interface with electronics. The Flight Dynamics covers different aspects of aircraft stability and the parameters that affect it. The wind tunnel experiment demonstrates the longitudinal stability, understanding of which is crucial for flight

Student learning outcomes



Date	Topic	Location	Lecture Content	Demonstration/Lab Content	Suggested Readings
Week 10	Avionics standardisation. State variable technique.	Ainswth 102 CivEng G1	ARINC standards. Longitudinal and lateral state-space models.	N/A	Class readings
Week 11	<u>Lab report due.</u> Revision. Contingency time.	Ainswth 102 CivEng G1	TBA	N/A	Class readings

In this course, the 2019 myExperience feedback was highly positive. The only observable recommendation for improvement was the sound quality of the lecture recordings, which will be rectified this term.

9. Academic honesty and plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. *Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.*

Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. UNSW has produced a website with a wealth of resources to support students to understand and avoid plagiarism, visit: student.unsw.edu.au/plagiarism. The Learning Centre assists students with understanding academic integrity and how not to plagiarise. They also hold workshops and can help students one-on-one.

You 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. Students should allow sufficient time for research, drafting and the proper referencing of sources in preparing all assessment tasks.

If plagiarism is found in your work when you are in first year, your lecturer will offer you assistance to improve your academic skills. They may ask you to look at some online resources, attend the Learning Centre, or sometimes resubmit your work with the problem

