Course Outline

Semester 2 2018

AERO9610

THE SPACE SEGMENT

Contents

Contact hours

	Day	Time	Location
Lectures	Thursday	1pm - 4pm	Old Main Building 150

Summary and Aims of the

After successfully completing this course, you should be able to:

Learning Outcome		EA Stage 1 Competencies
1.	Discuss and apply space systems engineering methodology to the space segment	1.1, 1.5, 1.6, 2.3, 2.4, 3.2
2.	Assess the impact of the space environment on spacecraft and space mission design	1.1, 2.3, 3.3
3.	Select and design space power systems, telecommunication links and systems, structures, propulsion systems, attitude determination and control systems and thermal control systems for a space mission	1.2, 1.5, 2.1, 3.3
4.	Have a thorough understanding of the different subsystems that make up a spacecraft, and how they function and interact in each stage of development	1.1, 1.3, 1.5, 2.3, 2.4

4. Teaching strategies

The material of this course will be presented through a combination of lectures and in-class demonstrations. The lectures will focus on the presentation of the core content of the course.

Assignments

Presentation

All non-electronic submissions should have a standard School cover sheet which is available from this course's Moodle page.

All submissions are expected to be neat and clearly set out. Your results are the pinnacle of all your hard work and should be treated with due respect. Presenting results clearly gives the marker the best chance of understanding your method; even if the numerical results are incorrect.

Submission

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of 20 per cent (20%) of the maximum mark possible for that assessment item, per calendar day.

The late penalty is applied per calendar day (including weekends and public holidays) that the assessment is overdue. There is no pro-rata of the late penalty for submissions made part way through a day.

Work submitted after the 'deadline for absolute fail' is not accepted and a mark of zero will be awarded for that assessment item.

For some assessment items, a late penalty may not be appropriate. These are clearly indicated in the course outline, and such assessments receive a mark of zero if not completed by the specified date. Examples include:

a.

Mid-Semester Exam: There will be an in-class exam in week 6, covering all material from

Appendix A: Engineers Australia (EA) Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes
PE1: Knowledge and Skill Base	PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals
	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
	PE1.3 In-depth understanding of specialist bodies of knowledge
	PE1.4 Discernment of knowledge development and research directions
	PE1.5 Knowledge of engineering design practice
	PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice
PE2: Engineering Application Ability	