Course Outline

Contents

1. Staff contact details

Contact details and consultation times for course convenor

Name:

Contact hours

4. Teaching strategies

Teaching of this course is through lectures, demonstrations and laboratory sessions. All laboratory work is individual work and attendance is essential.

The tutorial sessions are designed to help you use the tools such as Matlab to solve complex control system problems. The tutorials will be partially introduced in the class and will be continued in the computer labs. Though not essential, you are encouraged to bring your own computer with Matlab installed (student version is sufficient) so that you can maintain a seamless continuation of your learning. The provision of the learning environment in the laboratory is to facilitate you to develop confidence in managing laboratory tasks as projects. The content delivered in the lectures will be used to design controllers and then to apply them to control real-life systems. Demonstrators in the laboratories are there to provide you all the guidance and assistance is managing the laboratory tasks.

5. Course schedule

Topic	Mondays (10 am – 12 pm)	Location	Lecture Content	Demo/ Lab	Suggested Readings
Introduction	Week 1	Colombo A	Introduction, Qualitative analysis of a control system, simulation of control systems using Matlab	None	Moodle lecture notes
Automatic Control Systems	Week 2	Colombo A	Mathematical modelling of a DC servo motor driving a positioning system, continuous time systems, characteristic equation, stability and time response.	None	Moodle lecture notes het

6. Assessment

Calculators

You will need to provide your own calculator, of a make and model approved by UNSW, for the examinations. The list of approved calculators is shown at student.unsw.edu.au/exam-approved-calculators-and-computers

It is your responsibility to ensure that your calculator is of an approved make and model, and to obtain an “Approved” sticker for it from the School Office or the Engineering Student Centre prior to the examination. Calculators not bearing an “Approved” sticker will not be allowed into the examination room.

Special co nsideration and s upplementary assessment

For details of applying for special consideration and conditions for the award of supplementary assessment, see the School intranet, and the information on UNSW’s Special Consideration page.

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 1al taC45(l)-1. at UtakhinforsPlmi

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Appendix A: Engineers Australia (EA) Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes
PE1: Knowledge and Skill Base	