



## UNSW Course Outline

# ZEIT8245 Systems Thinking and Modelling Project - 2024

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## General Course Information

**Course Code :** ZEIT8245

**Year :** 2024

**Term :** Semester 2

**Teaching Period :** Z2

**Is a multi-term course? :** No

**Faculty :** UNSW Canberra

**Academic Unit :** School of Systems and Computing

**Delivery Mode :** Online

**Delivery Format :** Standard

**Delivery Location :** UNSW Canberra at ADFA

**Campus :** UNSW Canberra

**Study Level :** Postgraduate

**Units of Credit :** 3

### Useful Links

[Handbook Class Timetable](#)

## Course Details & Outcomes

### Course Description

To reinforce the theory introduced in ZEIT8244 *Systems Thinking and Modelling Knowledge* this project course involves a simulated design exercise that allows students to build on their fundamental understanding of the systems thinking/system dynamics approach, as well as their

capacity to use this approach to critically analyse problematic issues related to systems engineering and project management.

## Course Learning Outcomes

Course Learning Outcomes
CLO1 : Investigate the value of using systems thinking/system dynamics approach in analysing problematic issues and inform decision making;
CLO2 : Use the systems thinking language to define and characterise complex problems, and their dominant features;
CLO3 : Apply various systems thinking and systems dynamics techniques and tools to visualise, analyse, and communicate about various aspects of complex problems;
CLO4 : Interpret the managerial and practical implications of the findings from systems thinking/system dynamics inquiry; and
CLO5 : Use the findings from qualitative systems thinking/system dynamics analysis as a basis for in-depth quantitative study.

Course Learning Outcomes	Assessment Item
CLO1 : Investigate the value of using systems thinking/system dynamics approach in analysing problematic issues and inform decision making;	• Assignment 1
CLO2 : Use the systems thinking language to define and characterise complex problems, and their dominant features;	• Assignment 1
CLO3 : Apply various systems thinking and systems dynamics techniques and tools to visualise, analyse, and communicate about various aspects of complex problems;	• Assignment 2
CLO4 : Interpret the managerial and practical implications of the findings from systems thinking/system dynamics inquiry; and	• Assignment 2
CLO5 : Use the findings from qualitative systems thinking/system dynamics analysis as a basis for in-depth quantitative study.	• Assignment 2

## Learning and Teaching Technologies

Moodle - Learning Management System

# Assessments

## Assessment Structure

Assessment Item	Weight	Relevant Dates
Assignment 1 Short Extension: Yes (3 days)	50%	
Assignment 2 Short Extension: Yes (3 days)	50%	

## Assessment Details

### Assignment 1

#### Assessment Overview

Students are expected to spend approximately 40 hours in completion of this assignment (approximately five hours per question).

The aim of the assignment is to allow students to demonstrate your understanding of the requirements engineering process.

No more than 1,250–1,500 words are required for each question.

#### Course Learning Outcomes

- CLO1 : Investigate the value of using systems thinking/system dynamics approach in analysing problematic issues and inform decision making;
- CLO2 : Use the systems thinking language to define and characterise complex problems, and their dominant features;

### Assignment 2

#### Assessment Overview

Students are expected to spend approximately 40 hours in completion of this assignment (approximately five hours per question).

The aim of the assignment is to allow students to demonstrate your understanding of the requirements engineering process.

No more than 1,250–1,500 words are required for each question.

#### Course Learning Outcomes

- CLO3 : Apply various systems thinking and systems dynamics techniques and tools to

- visualise, analyse, and communicate about various aspects of complex problems;
- CLO4 : Interpret the managerial and practical implications of the findings from systems thinking/system dynamics inquiry; and
  - CLO5 : Use the findings from qualitative systems thinking/system dynamics analysis as a basis for in-depth quantitative study.

## General Assessment Information

### Grading Basis

Standard

## Course Schedule

### Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

## Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Huadong Mo		R118, Building 20	02511451 83	Huadong is usually available by email and during online consultation times via the Moodle Collaborate platform. I also welcome face-to-face discussion in my office during working hours by email appointment.	No	Yes

## Other Useful Information

### School-specific Information

#### The Learning Management System

Moodle is the Learning Management System used at UNSW Canberra. All courses have a Moodle site which will become available to students at least one week before the start of semester.

Please find all help and documentation (including Blackboard Collaborate) at the Moodle Support page.

UNSW Moodle supports the following web browsers:

- Google Chrome 50+
- Safari 10+

Internet Explorer is not recommended. Addons and Toolbars can affect any browser's performance.

Operating systems recommended are:

- Windows 10,
- Mac OSX Sierra,
- iPad IOS10

Further details:

[Moodle System Requirements](#)

[Moodle Log In](#)

If you need further assistance with Moodle:

For enrolment and login issues please contact:

IT Service Centre

Email: [itservicecentre@unsw.edu.au](mailto:itservicecentre@unsw.edu.au)

Phone: (02) 9385-1333

International: +61 2 9385 1333

For all other Moodle issues please contact:

External TELT Support

Email: [externalteltsupport@unsw.edu.au](mailto:externalteltsupport@unsw.edu.au)

Phone: (02) 9385-3331

International: +61 2 938 53331

Opening hours:

Monday – Friday 7:30am – 9:30 pm

Saturday & Sunday 8:30 am – 4:30pm

### [Study at UNSW Canberra](#)

Study at UNSW Canberra has lots of useful information regarding:

- Where to get help
- Administrative matters
- Getting your passwords set up
- How to log on to Moodle
- Accessing the Library and other areas.

### [UNSW Canberra Student Hub](#)

For News and Notices, Student Services and Support, Campus Community, Quick Links, Important Dates and Upcoming Events

## School Contact Information

**Deputy Head of School (Education):** Dr Erandi Hene Kankanamge

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T: 02 5114 5284

Syscom Admin Office: Building 15, Level 1, Room 101 (open 10am to 4pm, Mon to Fri)