



UNSW Course Outline

ZEIT8310 Project Schedule and Budget Control - 2024

Published on the 12 Feb 2024

General Course Information

Course Code : ZEIT8310

Year : 2024

Term : Semester 1

Teaching Period : Z1

Is a multi-term course? : No

Faculty : UNSW Canberra

Academic Unit : School of Engineering and Technology

Delivery Mode : Online

Delivery Format : Standard

Delivery Location : UNSW Canberra at ADFA

Campus : UNSW Canberra

Study Level : Postgraduate

Units of Credit : 6

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

The success of projects and the project management team is often measured through achieving the targeted projects' time, cost and scope which have been set or estimated during the creating of the projects. Therefore, it is critical to know the basic knowledge, tools and techniques for

developing a proper project scope, scheduling and budgeting it and also control (i.e., examine the progress over time).

This course introduces students to the underlying principles and practice of managing projects. It covers the body of knowledge needed for effective management of projects addressing techniques for project planning, scheduling and budgeting, managing resources, project progress reporting and project control. This course enables students to understand the concepts of time, resources and cost management and the measures and techniques to control projects.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Understand the processes for project scheduling, budgeting, and control.
CLO2 : Develop project plan, schedule and budget baselines using techniques such as PERT, CPM (e.g., AOA, AON), and EVM.
CLO3 : Be able to control the project progress by evaluating Earned Value Management (EVM).
CLO4 : Understand how to plan and approach in the face of changing project requirements (Handling uncertainties in project schedules)

Course Learning Outcomes	Assessment Item
CLO1 : Understand the processes for project scheduling, budgeting, and control.	<ul style="list-style-type: none">• Online Quiz• Assignment 1• Assignment 2
CLO2 : Develop project plan, schedule and budget baselines using techniques such as PERT, CPM (e.g., AOA, AON), and EVM.	<ul style="list-style-type: none">• Online Quiz• Assignment 1• Assignment 2
CLO3 : Be able to control the project progress by evaluating Earned Value Management (EVM).	<ul style="list-style-type: none">• Assignment 2
CLO4 : Understand how to plan and approach in the face of changing project requirements (Handling uncertainties in project schedules)	<ul style="list-style-type: none">• Assignment 1• Assignment 2

Learning and Teaching Technologies

Moodle - Learning Management System | Blackboard Collaborate

Learning and Teaching in this course

The course will be offered in distance mode only. The formal content of this course is delivered

in a combination of different formats: course notes, and selected readings. To augment the formal course materials, you are expected to contribute to the online discussion forums by sharing your expertise, experiences, and explorations with other students.

All course materials will be progressively published on the course's Moodle website. Lecture notes will be posted on the Moodle website at the start of the week the material is scheduled to be covered. Students will confirm the major learning outcomes of this course through the completion of the assignments. The assignments have been designed to demonstrate: (a) your understanding of the fundamental concepts taught; and (b) your ability to apply and build upon those concepts.

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 7, 10, Mac OSX Sierra, iPad IOS10

For further details about system requirements click [here](#).

Log in to Moodle [here](#).

If you need further assistance with Moodle:

For enrolment and login issues please contact:

IT Service Centre

Email: 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

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

Additional Course Information

Referencing

In this course, students are required to reference following the APA 7 / Chicago NB referencing style. Information about referencing styles is available at: <https://guides.lib.unsw.adfa.edu.au/c.php?g=472948&p=3246720>

Study at UNSW Canberra

<https://www.unsw.adfa.edu.au/study>

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.

Additional Information as required

CRICOS Provider no. 00098G

The University of New South Wales Canberra.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Online Quiz	20%	Start Date: 19/03/2024 03:00 PM Due Date: 19/03/2024 11:55 PM
Assignment 1	40%	Due Date: Week 9: 06 May - 10 May
Assignment 2	40%	Due Date: Week 13: 03 June - 07 June

Assessment Details

Online Quiz

Assessment Overview

The first is a mini-assessment activity designed as an online multiple-choice quiz. The aim of the first assessment is to allow students to test their basic knowledge of the concepts introduced in the course. The quiz assessment will be open for students to complete for a few hours on the due date. There will be 20 multiple-choice questions to be answered, while each will have 1 mark.

Course Learning Outcomes

- CL01 : Understand the processes for project scheduling, budgeting, and control.
- CL02 : Develop project plan, schedule and budget baselines using techniques such as PERT, CPM (e.g., AOA, AON), and EVM.

Detailed Assessment Description

This assessment is to be completed individually. The online quiz will be held in week 4, feedback and grades will be given to students immediately.

Assessment Length

20 multiple choice questions

Assignment 1

Assessment Overview

The second assessment activity is based on a real case study. The aim of the assessment is to allow students to demonstrate their understanding of how to apply the principles, process, and techniques presented in the course into a real-world case study relevant to your work or study area. Upon successful completion of the assessments, students will have developed a practical understanding of the requirements for successful development and the use of project scheduling and budgeting concepts. Students may need to use MS Project, during the preparation of these

two case studies. Full documentation of the case study and required tasks will be available on the course Moodle website.

Course Learning Outcomes

- CL01 : Understand the processes for project scheduling, budgeting, and control.
- CL02 : Develop project plan, schedule and budget baselines using techniques such as PERT, CPM (e.g., AOA, AON), and EVM.
- CL04 : Understand how to plan and approach in the face of changing project requirements (Handling uncertainties in project schedules)

Detailed Assessment Description

This assessment is to be completed individually. The assignment details will be provided at the beginning of the semester, feedback and grades will be given to students within 10 business days.

Please see assignment sheet in Moodle for further detail.

Assignment 2

Assessment Overview

The third assessment activity will also be based on either the same case study as of assignment 1 or a different case study. The aim of the assessments is to allow students to demonstrate their understanding of how to apply the principles, process, and techniques presented in the course into a real-world case study relevant to your work or study area. Upon successful completion of the assessments, students will have developed a practical understanding of the requirements for successful development and the use of project scheduling and budgeting concepts. Students may need to use MS Project, during the preparation of these two case studies. Full documentation of the case study and required tasks will be available on the course Moodle website.

Course Learning Outcomes

- CL01 : Understand the processes for project scheduling, budgeting, and control.
- CL02 : Develop project plan, schedule and budget baselines using techniques such as PERT, CPM (e.g., AOA, AON), and EVM.
- CL03 : Be able to control the project progress by evaluating Earned Value Management (EVM).
- CL04 : Understand how to plan and approach in the face of changing project requirements (Handling uncertainties in project schedules)

Detailed Assessment Description

This assessment is to be completed individually. The assignment details will be provided at the

beginning of the semester, feedback and grades will be given to students within 10 business days.

Please see assignment sheet in Moodle for further detail.

General Assessment Information

Students are required to complete three assessments. A mini-assessment activity designed as an online multiple-choice, and/or short answer quiz. The aim of the first assessment is to allow students to test their basic knowledge of the concepts introduced in the course. The quiz assessment will be open for students to complete for a few hours on the due date. The online quiz will be held in week 4, feedback and grades will be given to students prior to the census date (24th of March).

Two assignments are based on a real case study allowing students to demonstrate their understanding of applying the principles, processes, and techniques presented in the course to a real-world case study relevant to your work or study area. Upon completing the assessments, students will have developed a practical understanding of the requirements for successful development and the use of project scheduling and budgeting concepts. Students may need to use MS Project during the preparation of these two case studies. Full documentation of the case study and required tasks will be available on the course Moodle website.

Given that each assignment will be divided into sections based on course modules, it is recommended that you complete each section during the week in which that particular module is taught. For example, questions related to Risk Management should be attempted during the week that Risk Management is taught. This approach will spread the workload evenly over the semester and help consolidate the material as it is presented.

Late Submission of Assessment

No late submission allowed. All requests for special consideration must be formally submitted via MyUNSW prior to the assessment due date.

Use of Generative AI in Assessments

PLANNING ASSISTANCE

As this assessment task involves some planning or creative processes, you are permitted to use software to generate initial ideas. However, you must develop or edit those ideas to such a significant extent that what is submitted is your own work, i.e. only occasional AI generated

words or phrases may form part of your final submission. It is a good idea to keep copies of the initial prompts to show your lecturer if there is any uncertainty about the originality of your work.

If the outputs of generative AI such as ChatGPT form a part of your submission, it will be regarded as serious academic misconduct and subject to the standard penalties, which may include 00FL, suspension and exclusion.

* To cite: OpenAI (Year Accessed). ChatGPT. OpenAI. <https://openai.com/models/chatgpt/>

* Please note that the outputs from these tools are not always accurate, appropriate, nor properly referenced. You should ensure that you have moderated and critically evaluated the outputs from generative AI tools such as ChatGPT before submission.

Grading Basis

Standard

Requirements to pass course

You must achieve at least 50% to pass this course. You are not required to pass any one particular assignment; you simply need to pass the course overall.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 26 February - 1 March	Topic	Introduction to Project Management • Learn Project Management basics • Familiarise yourself with course content and Moodle
	Online Activity	Introduction to Project Management - Collaborative Lecture
Week 2 : 4 March - 8 March	Topic	Project Selection and Prioritisation • Learn how to select an appropriate project among the portfolio of projects
	Online Activity	Project Selection and Prioritisation - Collaborative Lecture
Week 3 : 11 March - 15 March	Topic	Project Scope Management • See online sources and set up a work breakdown structure
	Online Activity	Project Scope Management - Collaborative Lecture
Week 4 : 18 March - 22 March	Topic	Project Time Management (Scheduling) - Fundamentals • Set up a project schedule and learn some ways to estimate project durations
	Online Activity	Project Time Management (Scheduling) - Fundamentals - Collaborative Lecture
	Assessment	Online Quiz - 20 multiple choice questions
Week 5 : 25 March - 29 March	Topic	Project Time Management (Scheduling) - Critical Path Methodology (CPM) • Build the network diagram and identify the critical path • Use MS Project for critical path schedules
	Online Activity	Project Time Management (Scheduling) - Critical Path Methodology (CPM) - Collaborative Lecture
Week 6 : 1 April - 5 April	Topic	Project Time Management (Scheduling) - Resource Allocation • Define resources and assign resources
	Online Activity	Project Time Management (Scheduling) - Resource Allocation - Collaborative Lecture
Week 7 : 22 April - 26 April	Topic	Project Time Management (Scheduling) - Resource-Constrained Project Scheduling • Learn the ways to tackle constrained resources during project scheduling
	Online Activity	Project Time Management (Scheduling) - Resource-Constrained Project Scheduling - Collaborative Lecture
Week 8 : 29 April - 3 May	Topic	Project Time Management (Scheduling) - Alternative Scheduling Methods • Learn some non-traditional ways of project scheduling methods
	Online Activity	Project Time Management (Scheduling) - Alternative Scheduling Methods - Collaborative Lecture
Week 9 : 6 May - 10 May	Topic	Reducing Project Duration • Work on some methodologies to reduce project durations
	Online Activity	Reducing Project Duration - Collaborative Lecture
	Assessment	Assignment 1 Due
Week 10 : 13 May - 17 May	Topic	Project Budgeting (1): Estimate Cost • Learn some possible ways to estimate costs
	Online Activity	Project Budgeting (1): Estimate Cost - Collaborative Lecture
Week 11 : 20 May - 24 May	Topic	Project Budgeting (2): Determine Budget • Use the cost estimation methods to determine the project budget
	Online Activity	Project Budgeting (2): Determine Budget - Collaborative Lecture
Week 12 : 27 May - 31 May	Topic	Controlling Projects: Earned Value Management • Apply the EVM concept to control and monitor project performance • Use MS project to monitor and control projects
	Online Activity	Controlling Projects: Earned Value Management - Collaborative Lecture
Week 13 : 3 June - 7 June	Topic	Project Risk Planning: PERT • Work on some project risk management strategies and learn how to apply PERT to handle uncertain durations
	Online Activity	Project Risk Planning: PERT - Collaborative Lecture
	Assessment	Assignment 2 Due

Attendance Requirements

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

General Schedule Information

Collaborative /interactive sessions via Moodle (known as Blackboard Collaborative Session) will be arranged weekly. The detail will be provided during the course.

Course Resources

Prescribed Resources

Timothy Kloppenborg, Vittal S. Anantatmula, and Kathryn Wells (2023), "Contemporary Project Management: Plan-Driven and Agile Approaches - 5th Edition" Cengage Learning

Recommended Resources

Project Management Institute (2017). *"A Guide to the Project Management Body of Knowledge (PMBOK® Guide) - Sixth Edition"*, Newtown Square, Pennsylvania.

Microsoft Project

Course Evaluation and Development

One of the key priorities in the 2025 Strategy for UNSW is a drive for academic excellence in education. One of the ways of determining how well UNSW is progressing towards this goal is by listening to our own students. Students will be asked to complete the myExperience survey towards the end of this course.

Students can also provide feedback during the semester via: direct contact with the lecturer, the "On-going Student Feedback" link in Moodle, Student-Staff Liaison Committee meetings in schools, informal feedback conducted by staff, and focus groups. Student opinions really do make a difference. Refer to the Moodle site for this course to see how the feedback from previous students has contributed to the course development.

Important note: Students are reminded that any feedback provided should be constructive and professional and that they are bound by the Student Code of Conduct Policy

<https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf>

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Anthony Sexton		R130, Building 20	+61 2 5114 5381	Usually available for consultation during normal working hours. Please call or email to make an appointment.	No	Yes

Other Useful Information

Academic Information

Course Evaluation and Development

One of the key priorities in the 2025 Strategy for UNSW is a drive for academic excellence in education. One of the ways of determining how well UNSW is progressing towards this goal is by listening to our own students. Students will be asked to complete the myExperience survey towards the end of each course.

Students can also provide feedback during the semester via: direct contact with the lecturer, the “On-going Student Feedback” link in Moodle, Student-Staff Liaison Committee meetings in schools, informal feedback conducted by staff, and focus groups (where applicable). Student opinions really do make a difference. Refer to the Moodle site for your course to see how the feedback from previous students has contributed to the course development.

Important note: Students are reminded that any feedback provided should be constructive and professional and that they are bound by the Student Code of Conduct.

<https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf>

Equitable Learning Services (ELS)

Students living with neurodivergent, physical and/or mental health conditions or caring for someone with these conditions may be eligible for support through the Equitable Learning Services team. Equitable Learning Services is a free and confidential service that provides practical support to ensure your mental or physical health conditions do not adversely affect your studies.

Our team of dedicated **Equitable Learning Facilitators (ELFs)** are here to assist you through this

process. We offer a number of services to make your education at UNSW easier and more equitable.

Further information about ELS for currently enrolled students can be found at: <https://www.student.unsw.edu.au/equitable-learning>

Academic Honesty and Plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW staff and students have a responsibility to adhere to this principle of academic integrity. All students are expected to adhere to UNSW's Student Code of Conduct. Find relevant information at: [Student Code of Conduct \(unsw.edu.au\)](https://www.student.unsw.edu.au/student-code-of-conduct)

Plagiarism undermines academic integrity and is not tolerated at UNSW. It is defined as using the words or ideas of others and passing them off as your own, and can take many forms, from deliberate cheating to accidental copying from a source without acknowledgement.

For more information, please refer to the following:

<https://student.unsw.edu.au/plagiarism>

Submission of Assessment Tasks

Special Consideration

Special Consideration is the process for assessing and addressing the impact on students of short-term events, that are beyond the control of the student, and that affect performance in a specific assessment task or tasks.

Applications for Special Consideration will be accepted in the following circumstances only:

- Where academic work has been hampered to a substantial degree by illness or other cause;
- The circumstances are unexpected and beyond the student's control;
- The circumstances could not have reasonably been anticipated, avoided or guarded against by the student; and either:
 - (i) they occurred during a critical study period and was 3 consecutive days or more duration, or a total of 5 days within the critical study period; or
 - (ii) they prevented the ability to complete, attend or submit an assessment task for a

specific date (e.g. final exam, in class test/quiz, in class presentation)

Applications for Special Consideration must be made as soon as practicable after the problem occurs and at the latest within three working days of the assessment or the period covered by the supporting documentation.

By sitting or submitting the assessment task the student is declaring that they are fit to do so and cannot later apply for Special Consideration (UNSW 'fit to sit or submit' requirement).

Sitting, accessing or submitting an assessment task on the scheduled assessment date, after applying for special consideration, renders the special consideration application void.

Find more information about special consideration at: <https://www.student.unsw.edu.au/special/consideration/guide>

Or apply for special consideration through your [MyUNSW portal](#).

Late Submission of assessment tasks (other than examinations)

UNSW has a standard late submission penalty of:

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

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

Electronic submission of assessment

Except where the nature of an assessment task precludes its electronic submission, all assessments must be submitted to an electronic repository, approved by UNSW or the Faculty, for archiving and subsequent marking and analysis.

Release of final mark

All marks obtained for assessment items during the session are provisional. The final mark as published by the university following the assessment review group meeting is the only official mark.