

Teaching, Learning and Pedagogy Division

Reg. No. 200604393R

CURRENT COURSE OUTLINE

Academic Year	AY 2020-21	Semester	1	
Course Coordinator	Lim Siow Yong			
Course Code	EN 4711			
Course Title	Seminars and S	Site Visits		
Pre-requisites	Year 4 Standing]		
No of AUs	1			
Contact Hours	13 hours.			
Proposal Date	16 Jul 2021			

Course Aims

You are required to attend seminars conducted by guest speakers from industries and faculty members on professional aspects of civil and environmental engineering practice. You are required to attend site visits that show the planning, construction, management and other practical aspects of civil and environmental engineering projects. You will also learn to write a short individual technical report on one seminar and one site visit.

Intended Learning Outcomes (ILO)

Upon the successful completion of this course, you should be able to:

- 1. analyse and discuss how the theoretical knowledge in class are relevant to real engineering practice.
- 2. critically evaluate the various types of projects and through the site visits, how the theories you learned are applied in practice.
- 3. write a short technical report.

Course Content

In general, the course consist of 1-hour technical seminar session every week. The topic will vary each week and they will essentially cover as many aspects of civil and environmental engineering practices as possible. At least one site visit will be arranged for the semester. More site visits will be arranged when opportunities are available. Depending on the nature of the site visit, each site visit can be considered equivalent to 1 to 3 hrs of seminar sessions.

Assessment (includes both continuous and summative assessment)

Component	Course LO Tested	Related Programme LO or Graduate	Weighting	Team/Individual	Assessment rubrics
		Attributes			

1.Final Report	1,2	EAB SLO* f,g,h	100%	Individual	See Appendix 1	
		Total	100%			ì

^{*} EAB SLO stands for the Engineering Accreditation Board Student Learning Outcomes. The list is below:

- a) **Engineering knowledge:** Apply the knowledge of mathematics, natural science, engineering fundamentals, and an engineering specialisation to the solution of complex engineering problems.
- b) **Problem Analysis:** Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- c) **Design/development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- d) **Investigation:** Conduct investigations of complex problems using research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions
- e) **Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- f) **The engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- g) **Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for the sustainable development.
- h) **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- i) **Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
- j) **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- k) Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and economic decision-making, and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- I) **Life-long Learning:** Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

Formative feedback

A rubrics for the report has been provided. You are encouraged to check your report against the rubric before submitting.

You are encouraged to ask questions during and after the visits and seminars so as to get feedback on your thinking

Learning and Teaching approach

Approach	How does this approach support students in achieving the learning outcomes?
Introduction	You will need to understand the objectives, relevant background and motivation of the course.
Seminars	You need to attend all seminars to learn the professional aspect of civil and environmental engineering works.
Site visits	You need to attend one site visit to learn various types of projects and through the site visits, how the theories are applied in practice.
Report	You will develop the skills to write and summarise the key observations of what you have learn from the seminars and site visit.

Reading and References

Not applicable.

Course Policies and Student Responsibilities

You are expected to attend all seminars and at least one site visit for this course.

As a student of the course, you are required to abide by both the University Code of Conduct and the Student Code of Conduct. The Codes provide information on the responsibilities of all NTU students, as well as examples of misconduct and details about how students can report suspected misconduct. The university also has the Student Mental Health Policy. The Policy states the University's commitment to providing a supportive environment for the holistic development of students, including the improvement of your mental health and wellbeing. These policies and codes concerning students can be found in the following link: http://www.ntu.edu.sg/SAO/Pages/Policies-concerning-students.aspx

Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain of the definitions of any of these terms, you should go to the <u>academic integrity website</u> for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

Course Instructors

Instructor	Office Location	Phone	Email
Lim Siow Yong (coordinator)	N1-01a-15	6790 5287	csylim@ntu.edu.sg
Professionals from industries			
Other faculty members			

Planned Weekly Schedule

Week	Topic	Course LO	Readings/ Activities
1	Introduction-Rules and Options	f,g,h	N/A
2-3	Seminar/lecture series-Part 1	f,g,h	N/A
4-7	Site visits	f,g,h	N/A
4-9	Seminar/lecture series-Part 2	f,g,h	N/A
10-13	Final Report	f,g,h	N/A

Appendix 1: Final Report Assessment Criteria for EN4711 seminars and Site Visit

This course will be graded as 'Passed or Failed'.
You are expected to submit a short technical report of around 4 pages.

Criteria	Details	Unsatisfactory (25%)	Satisfactory (50%)	Good (75%)	Exemplary (100%)
Presentation (50 Marks)	English, spelling, punctuation and style (25)	Many typos and grammatical errors with poorly constructed sentences. Report is not properly formatted, even after supervisor's feedback.	Some typos and grammatical errors. Report is properly formatted.	No typos or errors of any kind. Properly constructed sentences. Well-organized chapters and properly formatted report.	No typos or errors of any kind. Properly formatted report. Report is very well organised and written.
	Logical and orderly layout of report (25)	Layout of report is not logical, even after supervisor's feedback.	Layout and order of report is acceptable and reasonable logical.	Layout and order of report is good and logical.	Clear layout and order of report with logical link among the chapters.
	Analysis of all factors in the seminar and site visit (25)	Poor analysis and not all the factors are considered, even after supervisor's feedback.	Adequate analysis and some factors are considered.	The factors are logically analyzed; trends are identified with further discussion.	Logical in-depth analysis is conducted; new ideas are proposed for possible new knowledge.
Development, discussion and conclusion of work (50 Marks)	Results, discussion, conclusions and suggestions (25)	No relevant results and poor discussion. No conclusions drawn; related outcomes are oversimplified, even after supervisor's feedback. No reflection of work done.	Relevant results and adequate discussion are presented. Conclusions are made, but lacking in understandings and logic. Little reflection of work done.	New and interesting results with good discussion. Conclusions are made in connection with the results and suggestions for future work. Highlight some limitation of current work.	High quality and new results, promising for a peer-reviewed publication. Logical in-depth conclusions reflecting student's deep understanding of the topic. Recognized the limitation of what has been achieved. Good suggestions for future work.