

GENERAL EDUCATION, KMITL

COURSE SYLLABUS

Course Code	90642031/96642031	Course Title	Professional Ethics and laws				
Total Credits	(3)	Semester / Year of Study	1/2026	Section		Date- Time	30 June– 14 November 2026
Course Description (English)	This course. Introduces the theory and practice of professional and overall ethics and law for professional including code of conducts and regulations in academic, professional and technical field. Students also learn about different approaches to ethical problems and examined real life case studies drawn from a variety of professional contexts. This course helps students develop skills and knowledge to manage and engage with ethical issue in their working life.						
Course Coordinator							
Course Instructors	Asst.Prof.Dr. Nisit Intamano						
Teaching Assistant (if any)							
Counselling Schedule	Every Thursday			Teaching Language	☐ Thai ☒ English ☐ Others, please specify.....		
Website or Online Teaching Method (if any)							
Course Learning Outcomes							
By the end of this course, the student will be able to CLO 1: Analyze Ethical Frameworks and Professional Standards Students will be able to critically analyze and apply major ethical theories and frameworks to evaluate professional conduct, demonstrating understanding of relevant codes of conduct, regulations, and legal requirements across academic, professional, and technical fields. CLO 2: Evaluate and Resolve Ethical Dilemmas Students will be able to identify, assess, and propose reasoned solutions to complex ethical problems in professional contexts by examining real-life case studies and applying systematic ethical decision-making approaches. CLO 3: Demonstrate Professional Ethical Competence Students will be able to integrate ethical principles and professional responsibilities into their practice, showing the ability to recognize ethical issues, engage in ethical reasoning, and make informed decisions that align with professional standards in their working life.							

General Education Learning Outcome: GE-LO		
GE-LO	Value	
☒ GE-LO-1 Analytical and Critical Thinking	4	
☐ GE-LO-2 Complex Problem Solving		
☐ GE-LO-3 Creativity		
☒ GE-LO-4 Interpersonal Skills	4	
☐ GE-LO-5 Integrity and Perseverance		
☒ GE-LO-6 Active Learning and Learning Strategies	3	
☐ GE-LO-7 Resilience, Stress Tolerance and Flexibility		
☒ GE-LO-8 Leadership and Social Influence	2	
☐ GE-LO-9 Communication		
☐ GE-LO-10 Entrepreneurship and Startup		
☒ GE-LO-11 Digital Quotient Literacy and Digital Media Production	2	
Total Value	<u>15</u>	

Teaching Plan and Evaluation Plan

Week	Topic/Sub-topic	Activities	Notes
1	INTRODUCTION TO THE ETHICALLY RESPONSIBLE ENGINEER	Lecture and Discussion	
2	SOCIOLOGICAL AND ETHICAL PRELIMINARIES	Lecture and Discussion	
3	THE FUNDAMENTAL ETHICAL RESPONSIBILITIES OF ENGINEERS	Lecture and Discussion	
4	ENGINEERING SOCIETY CODES OF ETHICS	Lecture and Discussion	
5	ETHICAL ISSUES AND HARM	Lecture and Discussion	
6	INTERNATIONAL AND THAILAND CASES STUDIES	Lecture and Discussion	
7	The Union Carbide MIC Plant in Bhopal (1970–1984)	Group Presentation	
8	The Space Shuttle “Challenger” (1983–1986)	Group Presentation	
9	The Ford “Pinto” (1969–1972)	Lecture and Discussion	
10	Topf & Sons: Crematorium Ovens for the Nazi SS (1939–1945)	Lecture and Discussion	
11	The Apple “Newton MessagePad” (1990–1993)	Lecture and Discussion	
12	The “Citicorp Center” Tower (1970–1978)	Lecture and Discussion	
13	TRW and the US Ballistic Missile Defense System (1995–2003)	Group Presentation	
14	Current Case studies of the laws and analyses 1	Group Presentation	
15	Current Case studies of the laws and analyses 1	Group Presentation	

Evaluation Plan

Assessment Activities	Value	Score	Week of Evaluation	Notes
Attendance	2	8	Throughout the semester	
Class and course content participation	4	16	Throughout the semester	
Group Presentation	6	24	Week 7,8,13,14	
Final Quiz	3	12	Week 15	
Total	15	60		

Evaluation criteria

☒ Group-based								
☐ Standard-based								
Grade	A	B+	B	C+	C	D+	D	F
Score (60 points)	57-60	49-56.9	41-48.9	34-40.9	27-33.9	21-26.9	15-20.9	0-14.9
☐ Satisfactory/Unsatisfactory (S/U)								
Grade	S				U			
Score (60 points)	30-60				0-29.9			

Scoring criteria according to Assessment Plan

Assessment Activities	Learning Outcomes	Value	Level			
			4 (Excellent)	3 (Good)	2 (Fair)	1 (Poor)
1. Class attendance	GE-LO 8	2	Students attend the class on time not less than 11 classes.	Students attend the class on time 9 – 10 classes	Students attend the class on time 7– 8 classes	Students attend the class on time less than 7 classes
2. Class and course content participation	GE-LO 4	4	Students effectively participate in activities not less than 11 times	Students sufficient participate in activities 9 – 10 times	Students fairly participate in activities 7– 8 times	Students silently or poorly participate in activities less than 7 times
3. Group presentation	GE-LO 1	1	Presentation score not less than 80%.	Presentation score not less than 70%.	Presentation score not less than 60%.	Presentation score not less than 50%.
	GE-LO 6	3	Presentation contents are taken from materials provided by the instructor and students use thought-provoking, creative and reliable materials for the contents	Presentation contents are taken from materials provided by the instructor and students use a variety of reliable materials for the contents	Presentation contents are taken from materials provided by the instructor and students use a few materials mentioned in the classroom for the contents.	Presentation contents are taken from materials provided by the instructor only and poorly co-ordinately working assignment among group.
	GE-LO 11	2	Students prepare and present group presentation with meaningful and creative digital media/infographic graph/table included for their group presentation.	Students prepare and present group presentation with digital media/infographic graph/table included for their group presentation.	Students prepare and present group presentation fairly for their group assignment.	Students prepare and present group presentation poorly for their group assignment.
4.Final Quiz	GE-LO 1	3	Final examination score not less than 80%	Final examination score not less than 70%	Final examination score not less than 60%	Final examination score not less than 50%