

GENERAL EDUCATION, KMITL

COURSE SYLLABUS

Course Code	96642017	Course Title	INNOVATION UNBOXED				
Total Credits	3 (3-0-6)	Semester / Year of Study	1/2569	Section		Date- Time	Thursday 09.00-12.00 and 13.00-16.00
Course Description (English)	Study importance and necessity of innovation; analysis of important concepts, theories, and principles concerning a development of innovation; usefulness of innovation to all levels of development, and study positive and negative factors on the development of innovation, with an adaptation or change in perspective to achieve innovative mindset, principles on analysis, synthesis, integration, and formation of innovation, and innovations from variety of applications of knowledge to various issues and situations.						
Course Coordinator							
Course Instructors	Dr. Panisa Arthachinda						
Teaching Assistant (if any)	-						
Counselling Schedule	Line and Email (24 hours)			Teaching Language	☐ Thai ☒ English ☐ Others, please specify.....		
Website or Online Teaching Method (if any)	Google Classroom						

Course Learning Outcome

1. To introduce students to the basic concepts of innovation and innovation management
2. To study fundamental business & management models used in innovative organizations
3. To understand the business environment, strategic planning and policy developments
4. To introduce students to real life case studies and stories about successful innovation leaders who perform in the industry with innovative products and services.
5. To explain students the development of innovative products and viability studies.
6. To improve students' self-management & empowerment skills.

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

Career Readiness Modules	
☐ Employee	☐ Self-employed
☐ Business Owner	☐ Investor
☒ None	

Teaching Plan and Evaluation Plan

Week	Topic/Sub-topic	Activities	Notes
1	Course introduction	Lecture, discussion, and activities	
2	Concept and theory of innovation	Lecture, discussion, and activities	
3	Creativity and innovation	Lecture, discussion, and group activities	
4	Mindset for innovation 1	Lecture, discussion, and activities	
5	Mindset for innovation 2	Lecture, discussion, and activities	
6	Innovation process: SEARCH	Lecture, discussion, and group activities	
7	Innovation process: SELECT	Lecture, discussion, and group activities	
8	Innovation process: IMPLEMENT	Lecture, discussion, experiment, and outdoor activities	
9	Innovation process: CAPTURE	Lecture, discussion, and activities	
10	Selling your idea	Lecture, discussion, and activities	
11	Change management	Lecture, discussion, and activities	
12	Spatial Computing in Reality	Lecture from guest speaker, discussion, and activities	[Guest speaker from Japanese tech company]
13	Project Presentation 1	Presentation and discussion	
14	Project presentation 2	Presentation and discussion	
15	Final exam	Exam	

Evaluation Plan

Assessment Activities	Value	Score	Week of Evaluation	Notes
1. Attendance and punctuality	1	4	Whole semester	Students who are absent more than three times without submitting a valid excuse will receive a failing grade (F) for the course
2. Workshop and class activities	6	24	1-12	In-class activities must be submitted during the class session. Late submissions will result in a reduced score, and failure to submit will result in a score of 0
3. Individual assignment	2	8	14	Individual assignment must be submitted in the system. Late submissions will result in a reduced score, and failure to submit will result in a score of 0
4. Final project	4	16	13-14	Group presentation is held in week 13 and 14
5. Final exam	2	8	15	Final exam is held in week 15. Failure to attend the final exam will result in a failing grade for this module
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. Attendance and punctuality	GE-LO-8	1	Attend class punctually at least 80% of the time	Attend class punctually at least 70% of the time	Attend class punctually at least 60% of the time	Attend class punctually less than 50% of the time
2. Workshop and class activities, such as... - Unleash your inner innovator - The unusual use - Storyboard - Business Model Canvas - ETC	GE-LO-3	5	Students demonstrate an ability to generate innovative ideas and adapt existing concepts to find diverse solutions. They effectively expand on their ideas, presenting them clearly and comprehensively across all relevant aspects	Students demonstrate an ability to generate innovative ideas and adapt existing concepts to find diverse solutions. While they can develop new concepts, their expansion of ideas may lack clarity or completeness in some areas	Students demonstrate an ability to generate innovative ideas and adapt existing concepts to find diverse solutions. However, slowly or cannot keep up with some limitations.	The student is unable to demonstrate skills according to the scoring criteria in the range of 2-4.
	GE-LO-9	1	Students effectively capture the core issues of the messages and select appropriate tools and channels for communication. They convey their messages clearly and directly, providing strong supporting reasons, and are adept at	Students effectively capture the core issues of the messages and select appropriate tools and channels for communication. Even though their supporting reasons are clear, their attempt to address misunderstandings	Students demonstrate basic communication skills, but their choice of tools is sometimes appropriate. Their messages lack clarity and strong supporting reasons, leading to some misunderstandings.	The student is unable to demonstrate skills according to the scoring criteria in the range of 2-4.

Assessment Activities	Learning Outcomes	Value	Level			
			4 (Excellent)	3 (Good)	2 (Fair)	1 (Poor)
			resolving any misunderstandings from the listeners	among listeners is limited		
3. Individual assignment: Innovative idea that change the world	GE-LO-1	1	Students demonstrate an ability to identify the importance of content in relation to the course and its impact. They can effectively recognize relationships between different concepts and draw well-supported conclusions from data to explain their ideas	Students demonstrate an ability to identify the importance of content in relation to the course and its impact. While they can identify relationships between concepts, their conclusions from data are somewhat less robust and may lack depth in supporting their ideas	Students demonstrate an ability to identify the importance of content in relation to the course and its impact. However, they struggle to consistently identify relationships between concepts, and their conclusions drawn from data are often weak or insufficient to fully support their ideas	The student is unable to demonstrate skills according to the scoring criteria in the range of 2-4.
	GE-LO-3	1	Students demonstrate an ability to generate innovative ideas and adapt existing concepts to find diverse solutions. They effectively expand on their ideas, presenting them clearly and	Students demonstrate an ability to generate innovative ideas and adapt existing concepts to find diverse solutions. While they can develop new	Students demonstrate an ability to generate innovative ideas and adapt existing concepts to find diverse solutions. However, slowly or	The student is unable to demonstrate skills according to the scoring criteria in the range of 2-4.

Assessment Activities	Learning Outcomes	Value	Level			
			4 (Excellent)	3 (Good)	2 (Fair)	1 (Poor)
			comprehensively across all relevant aspects	concepts, their expansion of ideas may lack clarity or completeness in some areas	cannot keep up with some limitations.	
4. Final project: Innovation for Our Future Generation	GE-LO-3	1	Student demonstrates an ability to generate innovative ideas and adapt existing concepts to find diverse solutions. They effectively expand on their ideas, presenting them clearly and comprehensively across all relevant aspects	Student demonstrates an ability to generate innovative ideas and adapt existing concepts to find diverse solutions. While they can develop new concepts, their expansion of ideas may lack clarity or completeness in some areas	Student demonstrates an ability to generate innovative ideas and adapt existing concepts to find diverse solutions. However, slowly or cannot keep up with some limitations.	The student is unable to demonstrate skills according to the scoring criteria in the range of 2-4.
	GE-LO-8	1	Students demonstrate leadership skills by effectively collaborating within the team and fostering positive relationships. They motivate team members, take responsibility for	Students demonstrate leadership skills by effectively collaborating within the team and fostering positive relationships. They can motivate some	Students exhibit basic leadership skills but often have difficulty collaborating effectively with the team. Their motivation for team members is limited,	The student is unable to demonstrate skills according to the scoring criteria in the range of 2-4.

Assessment Activities	Learning Outcomes	Value	Level			
			4 (Excellent)	3 (Good)	2 (Fair)	1 (Poor)
			their actions, and honor the roles and responsibilities of their coworkers	team members and communicate changes, but may not consistently take responsibility or fully honor the roles of others	and they may struggle to take responsibility for their actions, often neglecting the roles of their coworkers.	
	GE-LO-10	1	Students effectively apply their knowledge to create innovative solutions, demonstrating a strong understanding of business risks. They set clear goals, prepare comprehensive plans, and thoroughly analyze financial issues and other ethical considerations	Students can apply their knowledge to create innovative solutions, demonstrating a strong understanding of business risks. They set goals and prepare plans, but their financial analysis and consideration of ethical issues may lack depth in some areas	Students can apply their knowledge to create innovative solutions but struggle to apply their knowledge effectively. Also, their analysis of financial issues and ethical considerations is incomplete	The student is unable to demonstrate skills according to the scoring criteria in the range of 2-4.
	GE-LO-11	1	Students demonstrate strong proficiency in using digital technology to produce high-quality digital media. They	Students demonstrate strong proficiency in using digital technology to produce high-quality	Students demonstrate proficiency in using digital technology to produce digital media. They can use	The student is unable to demonstrate skills according to the scoring criteria in the range of 2-4.

Assessment Activities	Learning Outcomes	Value	Level			
			4 (Excellent)	3 (Good)	2 (Fair)	1 (Poor)
			effectively utilize digital tools to present their ideas, create business opportunities, foster collaboration. They understand online-related laws and can manage time to produce digital media effectively	digital media. They can use digital tools to present ideas and understand related laws, but their work is still limited because of limitation in time and production management	digital tools to present ideas but lack of awareness regarding online-related laws.	
5. Final exam	GE-LO-1	1	Students demonstrate an ability to identify the importance of content in relation to the course and its impact. They can effectively recognize relationships between different concepts and draw well-supported conclusions from data to explain their ideas	Students demonstrate an ability to identify the importance of content in relation to the course and its impact. While they can identify some relationships between concepts, their conclusions from data are somewhat less robust and may lack depth in supporting their ideas	Students demonstrate an ability to identify the importance of content in relation to the course and its impact. However, they struggle to consistently identify relationships between concepts, and their conclusions drawn from data are often weak or insufficient to fully support their ideas	The student is unable to demonstrate skills according to the scoring criteria in the range of 2-4.
	GE-LO-2	1	Students exhibit a strong ability to identify and	Students exhibit a strong ability to	Students exhibit an ability to identify and	The student is unable to demonstrate skills

Assessment Activities	Learning Outcomes	Value	Level			
			4 (Excellent)	3 (Good)	2 (Fair)	1 (Poor)
			address complex problems presented in the exam. They demonstrate a clear understanding of the situation and think systematically, generating creative solutions with a flexible approach	identify and address complex problems presented in the exam. While they understand the situation, their problem-solving may lack systematic thinking, and their solutions are not effective or flexible	address complex problems presented in the exam. They struggle to think systematically and may provide solutions that are overly simplistic, lacking creativity or flexibility in their approach	according to the scoring criteria in the range of 2-4.