


SYLLABUS

TLI 665 Pembangunan Berbasis Masyarakat (Society-based Development)

**Lecturers:
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**MASTER STUDY PROGRAM OF ENVIRONMENTAL ENGINEERING
FACULTY OF ENGINEERING
UNIVERSITAS ANDALAS
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	SYLLABUS SEMESTER	No.Dok :
	(TLI 665 Society-based Development)	Revisi :
		Tanggal : June 2020
		Halaman:
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Lecturer	Head of QC	Head of Master Study Program
SYLLABUS		
1. Lecture Information		
Study Program Name : Environmental Sanitation Infrastructure		
Lecture Name : Society-based Development		
Lecture Code : TLI 665		
Category : Required Study Program		
Unit : 2 units		

Year	: Year 1
Semester	: 1 (one)
Prasyarat	: -
Status (required/elective)	: Required
Lecturers	: 1. Dr. Fadjar Goembira 2. Dr.Eng Shinta Indah

2. Description of Lecture

The lecture discusses the issue of Soil and Groundwater Pollution. Characteristics and sources of soil and groundwater pollution. Regulations on soil and groundwater pollution. Risk assessment for soil and groundwater pollution. Site investigation and sampling analysis. Site investigation and monitoring. Method of remediation of polluted soils and groundwater.

3. Learning Achievement of Study Program

- Mastering the theory of engineering science, design engineering, methods and the latest techniques needed for the analysis and design of environmental management efforts;
- Mastering the contextual and current interdisciplinary approach related to the design of integrated environmental management systems.
- Able to solve engineering and technological problems and design systems, processes and components in environmental management efforts including management of drinking water, wastewater, solid waste, settlement drainage, liquid, solid and gas waste control systems, air pollution control and occupational health and safety (OHS) by utilizing other fields of science (if needed) and taking into account economic, health and public safety, cultural, social and environmental factors

4. Learning Achievement of Lecture

1. Discuss the concepts of leader, leadership, and management.
2. Articulate their vision through a strategic plan based on Theory of Change.
3. Choose from various communication skills in order to effectively lead a team.
4. Reflect on their current and desired capacity as leaders, in terms of personal and situational awareness
5. Appreciate the importance of behaviour change and advocacy in sanitation planning and delivery.
6. Discuss the concepts underpinning behaviour change & advocacy interventions.
7. Demonstrate an awareness of models, methods & tools that promote change in a diverse range of target populations & contexts.

5. Description of Lesson Plan

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Reference
1	Students are able to: <ul style="list-style-type: none"> • Explain the structure and learning objectives of the module; • Discuss the differences between a leader and a manager; • Self-assess their natural leadership styles; • Identify six different leadership styles; • Discuss the importance of reflection and self-awareness. 	<ul style="list-style-type: none"> • Introduction to module. • Leading and Managing. 	Lecture and discussion	2x50 minutes	Work individual and/ in groups	
2	Students are able to: <ul style="list-style-type: none"> • Discuss the difference between developing a leader and leadership; • Explain how competencies and an enabling environment relate to leadership. • Explain the concept and aspects of emotional intelligence; • Discuss how emotional intelligence can be relevant for a leader; • Reflect on own emotional intelligence. 	<ul style="list-style-type: none"> • The difference between a leader and leadership. • Competencies relevant for establishing an enabling leadership environment. • Emotional intelligence. 	Lecture and discussion	2x50 minutes	Work individual and/ in groups	
3	Students are able to: <ul style="list-style-type: none"> • Discuss why feedback is important to improve performance of leaders and provide tips for giving and receiving feedback; • Practice giving and receiving feedback; • Present a vision towards a sanitation issue; • Apply a theory of change framework to develop a plan for disseminating their vision. 	<ul style="list-style-type: none"> • Giving and receiving feedback. • Vision and strategy. 	Lecture and discussion	2x50 minutes	Work individual and/ in groups	

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Reference
4	<p>Students are able to:</p> <ul style="list-style-type: none"> • Describe how trust can shape working relationships and impact outputs; • Identify behaviours that influence trust and personal attitudes and skills to build and maintain trust in the short and long-term; • Describe the active listening cycle; • Discuss the importance of active listening for leaders; • Identify techniques for implementing active listening. 	<ul style="list-style-type: none"> • Building and maintaining trust. • Active listening. 	Lecture and discussion	2x50 minutes	Work individual and/ in groups	
5	<p>Students are able to:</p> <ul style="list-style-type: none"> • Explain why effective communication is essential for leading teams; • Discuss the communication feedback loop to interpret messages and respond appropriately; • Select and appropriate communication style and channel for different situations; • Discuss potential advantages and challenges of using consensus to make decisions; • Identify the eight steps for setting up and running a consensus-based decision making process. 	<ul style="list-style-type: none"> • Communication for leadership. • Consensus building. 	Lecture and discussion	2x50 minutes	Work individual and/ in groups	
6	<p>Students are able to:</p> <ul style="list-style-type: none"> • Discuss the impact of culture in understanding leadership; • Discuss sources of conflict for leaders working with teams; 	<ul style="list-style-type: none"> • Leadership in inter-cultural setting. • Conflict management. 	Lecture and discussion	2x50 minutes	Work individual and/ in groups	

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Reference
	<ul style="list-style-type: none"> • Discuss the importance of conflict management for leaders; • Identif different conflict management approaches. 					
7	<p>Students are able to:</p> <ul style="list-style-type: none"> • Identify different negotiation approaches; • Discuss the concept of principled negotiation; • Implement the four phases of negotiation; • Articulate what leader(ship) aspects they want to improve and how. 	<ul style="list-style-type: none"> • Negotiation. • Self-reflection and the way forward. 	Lecture and discussion	2x50 minutes	Work individual and/ in groups	
8	Mid-term Examination					
9	<p>Students are able to:</p> <ul style="list-style-type: none"> • Explain what behaviours and habits are; • Explain how people’s views inform constructions of what behaviours are bad and good; • Explain key actors in sanitation changes; • Understand and appreciate the importance of behavioral change interventions for sustainable city wide sanitation services; • Appreciate that there are several behaviors of users, service providers (and officials) which are key for improved sanitation services; • Appreciate that the drivers for behaviors go beyond knowledge and awareness. 	<ul style="list-style-type: none"> • What is behavior?: Behaviour science consepts (behaviors vs habits and drivers vs reinforcements); behavior and sanitation programming; key behavior change actors’ roles and responsibilities. • Sanitation behavior change and advocacy (setting the scene: defining behaviors across the sanitation chain and the importance of behavior change in urban 	Lecture and discussion	2x50 minutes	Work individual and/ in groups	

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Reference
		sanitation programming).				
10	<p>Students are able to:</p> <ul style="list-style-type: none"> • Appreciate that recurrent programming that persuade behavioral changes and public policy establishing and reinforcing behaviors are more effective than once-off communication; • Understand what a theory of change is and how it is applied in various behavioral change frameworks and tools. 	<ul style="list-style-type: none"> • Behavior change strategies (promoting change via persuasion and policy vs education/awareness raising). • Behavior change frameworks (what is a theory of change? Behavior change frameworks and approaches). 	Lecture and discussion	2x50 minutes	Work individual and/ in groups	
11	<p>Students are able to:</p> <ul style="list-style-type: none"> • Move from understanding to intervention in behaviors, seeing key decisions/steps; • Understand the basis for prioritization; • Importance of leadership buy-in and understanding extent programs/campaigns; • Explain why formative research is needed when designing behavior change programs/campaigns; • Experience behavior change design and limitations of different conceptual models for urban sanitation behaviors (beyond the personal hygiene domain). 	<ul style="list-style-type: none"> • Behavior change intervention design- formative research (behavior change intervention process and prioritization; embedding behavior change interventions; what is formative research and why it is needed?). • Case example applications (in class exercises and discussions over 	Lecture and discussion	2x50 minutes	Report of case study in local city	

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Reference
		hypothetical behavior change theory of change (BCTOC)/methods selection, implementation and evaluation of real-life case).				
12	<p>Students are able to:</p> <ul style="list-style-type: none"> • Understand the different levels of monitoring behavioral change, how it fits in the overall behavioral change process and how it fits within the overall urban sanitation monitoring system; • Strengthen their understanding of the different levels of objectives in behavior change and their interconnection; • Plan for monitoring and evaluation; • Use of monitoring in ongoing projects and sustaining change; • Understand key challenges in data quality. 	<ul style="list-style-type: none"> • Monitoring behavioral change (whether/how it occurred; strategy including objectives; theory of change validity and tracking change [planning: indicators, information and cost, data sources and collection tools, challenges]). 	Lecture and discussion	2x50 minutes	Report of case study in local city	
13	<p>Students are able to:</p> <ul style="list-style-type: none"> • Familiarize with real life cases of OHS from Asia and Africa. 	<ul style="list-style-type: none"> • Occupational health and safety spotlight. • Review: what works and what does not work in behavior change based on scientific evidence. • Designing behavior change package. • Maintaining behavior change design fidelity 	Lecture and discussion	2x50 minutes	Report of case study in local city	

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Reference
		<p>and integrity in different contexts and settings.</p> <ul style="list-style-type: none"> • Advocacy component. 				
14	<p>Students are able to:</p> <ul style="list-style-type: none"> • Gain knowledge and understanding about the development principles, methodology and applicability of CLTS in rural sanitation; • Appreciate the attitude required to implement behavior changes; • Understand the application of CLTS as compared to other approaches; • Reviewed the differences between individual vs collective behavior change; • Expose the methodology of triggering local rural communities to plan and achieve ODF status through collective local action; • Understand the complexities of UCLTS; • Develop a clear understanding on the areas of conflicting interest and synergies required between relevant stakeholders; • Understand the significance of formal and informal institutions, and community participation. 	<ul style="list-style-type: none"> • Community-led total sanitation (CLTS). • Urban CLTS. 	Lecture and discussion	2x50 minutes	Report of case study in local city	
15	<p>Students are able to:</p> <ul style="list-style-type: none"> • Gain knowledge of institutional triggering methodology of local, national, international stakeholders; 	<ul style="list-style-type: none"> • Policy and institutional triggering (institutional vs community triggering; MDG lessons and scale-up lessons; 	Lecture and discussion	2x50 minutes	Report of case study in local city	

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Reference
	<ul style="list-style-type: none"> • Appreciate the significance of an enabling environment when scaling up; • Understand the lessons from MDG success and failures towards ODF world; • Understand the link between sanitation behavior and public policy; • Appreciate how public policy can influence behavior at scale and over time; • Examine the critical role the media can play in breaking and forming new norms/habits. 	<p>methods and way forward for SDGs; cases).</p> <ul style="list-style-type: none"> • Public policy and behavior. • Media and advocacy. 				
16	Final Examination					

6. References

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7. Annex

Scoring Instrument: Mid-term examination : 35%; Final Examination: 35%; Assignment: 30%