SYLLABUS

TLI 663 Aspek Kelembagaan dan Finansial Sanitasi (Governance and Sanitation Financing)

> **Lecturers:** Dr.Puti Sri Komala Dr. Fadjar Goembira

MASTER STUDY PROGRAM OF ENVIRONMENTAL ENGINEERING FACULTY OF ENGINEERING UNIVERSITAS ANDALAS 2020

Curriculum for Master Study Program of Environmental Sanitation Infrastructure

UNIVERSITAS ANDALAS		SYLLABUS	No.Dok :
		SEMESTER	Revisi :
		(TLI 663 Governance and Sanitation	
		Financing)	Tanggal : June 2020
			Halaman:
Completed by:		Checked by:	Approved by:
Dr.Puti Sri Komala		Reri Afrianita, MT	Dr.Eng Zulkarnaini
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Lecturer		Head of QC	Head of Master Study Program
1. Lecture Information		SYLLABUS	
	- ·		
Study Program Name	• === • ==	ronmental Sanitation Infrastructure	
Lecture Name		rnance and Sanitation Financing	
Lecture Code	: TLI 6		
Category	-	ired Study Program	
Unit	: 2 uni	ts	

Year	: Year 2
Semester	: 3 (three)
Prasyarat	:-
Status (required/elective)	: Required
Lecturers	: 1. Dr.Puti Sri Komala
	2. Dr. Fadjar Goembira

2. Description of Lecture

The lecture describes approaches and identify factors for decision making processes related to sanitation governance and describe various sanitation financing options, business models in sanitation and develop a financially viable sanitation project.

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. Explain main approaches and theories on water and sanitation governance
- 2. Identify factors and decision making processes related to sanitation governance
- 3. Analyze sanitation governance structures from specific study cases, including integration of policies and strategies into government planning and budgeting systems
- 4. Contrast failures, successes, and journeys of sanitation histories and regulatory frameworks around the world
- 5. Evaluate elements for developing evidence based policies
- 6. Differentiate between various options for sanitation financing and assess the impact of service financing on municipal budget
- 7. Outline sustainability, explain and apply business and PPP models in sanitation
- 8. Use FSM Technical and Financial Assessment Tool for costing and financing of a sanitation project

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Referenc e
1	Understand the leadership concepts	An introduction to leadership concepts: inter- vs intra- development, management vs leadership	Lecture and discussion	2x50 minutes	Mid-term exam	Module 10
2	Understand how to develop a vision and translate it into a plan	Vision and StrategyGiving and receiving feedback	Lecture and discussion	2x50 minutes	Assignment	Module 10
3	Understand the concept of Change Management and Theory of Change frameworks	Change Management and Theory of Change frameworks	Lecture and discussion	2x50 minutes	Assignment	Module 10
4	Understand leading in inter-cultural settings.	 Inter-cultural leadership and competencies of a leader Leading across cultures 	Lecture and discussion	2x50 minutes	Presentation	Module 10
5	Understand several aspects of the team and inter-personal communication	 Building and maintaining trust Active listening Consensus building 	Lecture and discussion	2x50 minutes	Assignment	Module 10

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Referenc e
6	Understand the concept of conflict management, negotiate and Emotional Intelligence	 Approaches to conflict management Negotiation Emotional Intelligence 	Lecture and discussion	2x50 minutes	Mid-term exam	Module 10
7	Be able to carry out self- assessment in order to prepare an individual leadership development plan		Lecture and discussion	2x50 minutes	Mid-term exam	Module 10
8			Mid-term Exar	nination		
9	Understand to differentiate between various options for sanitation financing	 Overview of sanitation financing Overview of global sanitation financing requirement to meet SDG; Overview of conventional sources of financing (bilateral, multilateral, grants, loans, foundations, etc.) Introduction to new trends in financing (municipal market borrowings, pooled finance structures, social impact 	Lecture and discussion	2x50 minutes	Assignment	Module 7

Week	Indicator of Learning Achievements of Subjects	Topics	Method of Learning	Course Time	Assignment and Evaluation	Referenc e
		investments, crowdfunding, CSR funding				
10	Understand to assess the impact of service financing on municipal budget	Financing at national context: Decentralisation and Local Authority Finances	Lecture and discussion	2x50 minutes	Assignment	Module 7
11	Understand principles FSM Technical and Finacial Assessment Tool	Innovative Financing for Sanitation Saniplan Tool - financing model	Lecture and discussion	2x50 minutes	Final Exam	Module 7
12	Be able to explain and apply business in sanitation	Sanitation service and value chain, sustainability in sanitation Business Models in Sanitation Financial Flow in Business Models	Lecture and discussion	2x50 minutes	Final Exam	Module 7
13	Understand to apply Public Private Partnership (PPP) in sanitation	Sanitation Financing Modalities and Challenges Post Business Canvas PPP in Sanitation	Lecture and discussion	2x50 minutes	Final Exam	Module 7
14 and 15	Understand to introduce and demonstrate to work with "FSM Technical and Financial Assessment Tool" and	Sanitation project financing	discussion	2x50 minutes	Report	Module 7

Week	Indicator of Learning	Topics	Method of	Course Time	Assignment	Referenc
	Achievements of		Learning		and	e
	Subjects				Evaluation	
	use the tool to develop a					
	financially viable FSM					
	project					
16	Final Examination					

6. References

1. Module material 7 Sanitation Financing UNESCO IHE Global Sanitation Graduate School

2. Module material 10 – Leadership UNESCO IHE Global Sanitation Graduate School

3. Another reference related to Sanitation Technology

7. Annex

Scoring Instrument: Mid-term examination : 25%; Final Examination: 30%; Assignment: 20%; Report 25%