

TON DUC THANG UNIVERSITY

Faculty of Environment and Labor Safety

Studying One Semester in Faculty of Environment and Labor Safety

Course Description

Stt	Courses	Objectives	Contents	Number of Credit	Theory	Field or Laboratory	Form of Exam
Option 1 – Environmental Science							
1	Applied informatics of environment	Provide students with some basic knowledge about informatics technology application, geograhic information system (GIS), methods of environmental modelling in water supply and sanitation network management.	The course includes basic knowledge about - Information technology - Geograhic information system (GIS) - Computer models for environment.	3	2	1	- Exercise - Seminar - Report
2	Environmental toxicology	Provide students with basic knowledge about environmental toxicity, types of environmental toxins and their effects on human and ecosystems, risk assessment of environmental toxicity.	The course includes basic knowledge about - Environmental toxicity - Types of environmental toxins and their effects on human and ecosystems - Risk assessment of environmental toxicity.	2	2	0	- Exercise - Seminar - Report
3	Biodiversity conservation	Provide students with basic knowledge about biodiversity	The course includes basic knowledge about	3	2	1	- Exercise - Seminar

		<p>and conservation biology, approaches to conservation and sustainable development, threats to biodiversity, biodiversity conservation at levels of biological organization (genes, species, populations, communities, ecosystems, landscapes, and regions), approaches and planning for biodiversity conservation and sustainable development.</p>	<ul style="list-style-type: none"> - Biodiversity and conservation biology - Approaches to conservation and sustainable development - Threats to biodiversity, biodiversity conservation at levels of biological organization (genes, species, populations, communities, ecosystems, landscapes, and regions) - Approaches and planning for biodiversity conservation and sustainable development. 				<ul style="list-style-type: none"> - Report
4	Environmental resources management	<p>Provide students with basic knowledge about environmental management systems such as tools for present environmental management, regional environmental management, management of specific ecosystems (wetlands, river basin, tidal area,...).</p>	<p>The course includes basic knowledge about environmental management systems such as tools for</p> <ul style="list-style-type: none"> - Resent environmental management - Regional environmental management - Management of specific ecosystems (wetlands, river basin, tidal area,...). 	2	2	0	<ul style="list-style-type: none"> - Exercise - Seminar - Report

Option 2 – Environmental Engineering

1	Wastewater treatment engineering	Provide students with basic knowledge about water treatment engineering such as the characteristics of municipal and industrial wastewater, wastewater treatment methods including physicochemical and biological wastewater treatment processes and case studies on common wastewater treatment plants.	The course includes basic knowledge about water treatment engineering such as the characteristics of municipal and industrial wastewater, wastewater treatment methods including physicochemical and biological wastewater treatment processes and case studies on common wastewater treatment plants.	3	2	1	- Exercise - Seminar - Report
2	Water treatment engineering	Provide students with basic knowledge about water treatment processes such as Coagulation-Flocculation, Sedimentation, Flotation, Filtration, Ion exchange, Infestation...	The course includes basic knowledge about water treatment processes such as Coagulation-Flocculation, Sedimentation, Flotation, Filtration, Ion exchange, Infestation...	2	2	0	- Exercise - Seminar - Report
3	Solid and hazardous waste management	Provides students with the basic knowledge about properties of solid and hazardous waste, solid and hazardous waste management; and waste treatment engineering.	Course includes basic knowledge about properties of solid and hazardous waste; solid and hazardous waste management; and waste treatment engineering.	3	2	1	- Exercise - Seminar - Report

4	Critical analysis in environmental management	Provides basic knowledge of protecting human health and environment system in the light of economic development; suggesting solutions for prevention and elimination of environmental, health and social risks; and, predicting risks and hazards to environmental managers and investors in order to establish risk prevention frameworks/ plans.	Course includes introduction of critical analysis in environmental management, methods of assessing the risk, critical analysis in environmental management, cross-cutting aspects of risk management, risk prevention, response and monitoring; and, case studies of risk management.	2	2	0	- Exercise - Seminar - Report
---	---	--	--	---	---	---	-------------------------------------

Notes: 1 credit ≈ 15 periods; 1 period ≈ 45 minutes