Science International degree @ Mahidol (SIM)

Course Name : Environmental Risk Assessment (SCBE 318) 3(3-0-6)

Lecture : Tue (13:30 - 16:30)

Room : SC1-154, Salaya

Semester : Semester II 2022

Course Syllabus

Course Coordinator: Toemthip Poolpak, Ph.D.

Course Instructure: Assoc Prof. Prayad Pokethitiyook, Ph.D. (PP)

Course Description

A survey of risk assessment; environmental health regulations, decision-making, basic components and applications of environmental health risk assessment; exposure assessment; hazard identification; dose-response evaluation and risk management

Evaluation				
1. Mid-term examination	30%			
2. Final examination	30%			
3. Presentation & Reports	20%			
4. Class assignments	10%			
5. Attendants	10%			

Note: Grading system is A, B⁺, B, C⁺, C, D+, D and F.

Tentative Schedule

Month	Date	Topic	Activity
January	10	Introduction	PP
	17	Human Risk Assessment – hazard identification	PP
	24	Sustainability and Making Decisions Under	PP
		Uncertainty; Risk Assessment Paradigm	
	31	Risk, Cost and Benefit Analysis (RCBA) in Risk Assessment	PP
		and Management 1	
February	7	Risk, Cost and Benefit Analysis (RCBA) in Risk Assessment	PP
		and Management 2	
	14	Exposure Response Model for Risk Assessment 1	PP

	21	Exposure Response Model for Risk Assessment 2	PP
	28	Probability Dose-Response Model and Toxicology 1	PP
March	7	Mid-term Exam (w/calculator)	PP
	14	Probability Dose-Response Model and Toxicology 2	PP
	21	Monte Carlo Model	PP
	28	Risk Assessment and Modelling	PP
April	4	Case Study of Practical Risk Assessment	PP
	11	Practical Analysis of Decisions for Risk Management I	PP
	18	Practical Analysis of Decisions for Risk Management II	PP
	25	Strategic Environmental Assessment	PP
May	2	Final Exam	Exam

Course Coordinator: Dr. Toemthip Poolpak (TP)

Lecturer: Assoc. Prof. Dr. Prayad Pokethitiyook (PP)