Dongseo University
Global Studies Institute
Philosophy and Science
2016-1 Semester

Instructor: 엘레나
Office:
Phone: 051-320-2870
Email: elena@gdsu.dongseo.ac.kr

Classroom: N/A
Class Time: N/A
Office Hours: N/A

Course Description:
This course is designed to be an introduction to philosophical thinking in general along with overviewing selected philosophical methods, doctrines and leading ideas. We will focus on how Philosophy is useful for engineers and technology developers, how classical and modern thinkers formulate their questions and problems and solve them. We will also discuss about ethics in Engineering, questioning ourselves if human actions are free or determined? How far can we go? What do we need?

Course Goals & Objectives:
The main goal of this course is to give students knowledge about the roots of science - Philosophy. This should help students to understand how to learn new things, which methods and methodologies to apply in order to develop new brands and technologies, and how to improve professional practice through formulating new problems, developing creativity and communicative skills. At the conclusion of this course, the successful (passing) students will be able to think independently from stereotypes, formulate their own purposes and problems and develop strategies in order to achieve success.

Course Outline

Week		Description
1	**1**	Introduction: The Ignorance of Engineers and How They Know It.
	2	Introduction: The Ignorance of Engineers and How They Know It.
2	**1**	Engineering Philosophy of Technology
	2	Engineering Philosophy of Technology
3	**1**	Humanities Philosophy of Technology
	2	Humanities Philosophy of Technology
4	**1**	Ethnics in Engineering
	2	Ethnics in Engineering
5	**1**	Engineering for Peace: An Obligation of Professional Capabilities
	2	Engineering for Peace: An Obligation of Professional Capabilities
6	**1**	The Philosophical Questioning of Technology
	2	The Philosophical Questioning of Technology
7	**1**	From Philosophy to Technology: A Framework for Philosophical Analysis
	2	From Philosophy to Technology: A Framework for Philosophical Analysis
8	**1**	Mid-Term Exam
	2	Mid-Term Exam
9	**1**	The Formulation of Engineering Identities: Storytelling as Philosophical Inquiry

	2	The Formulation of Engineering Identities: Storytelling as Philosophical Inquiry
10	1	Transferable Skills Development in Engineering: Analysis of Service-Learning Impact.
	2	Transferable Skills Development in Engineering: Analysis of Service-Learning Impact.
11	1	Debunking Contemporary Myths Concerning Engineering
	2	Debunking Contemporary Myths Concerning Engineering
12	1	Types of Technology as Object
	2	Types of Technology as Object
13	1	Types of Technology as Knowledge
	2	Types of Technology as Knowledge
14	1	Types of Technology as Activity
	2	Types of Technology as Activity
15	1	Final exam
	2	Final exam

Textbook
- Required: Carl Mitcham, *Thinking through Technology The Path between Engineering and Philosophy* (1994: The University of Chicago Press)
- Required: Diane P. Michelfelder, *Philosophy and Engineering: Reflections on Practice, Principles and Process* (2013: Springer)

Class Website: eclass.dongseo.ac.kr

Course Assignments & Grading:
- *Grading: Attendance - 10% Quizzes - 5% Assignment – 10% Presentation – 10% Mid-term exam - 30% Final exam - 35%*
- *Assignment: some home assignment*

Teaching Method:
- Lectures / Presentations / Discussions