

Course Title

Sustainable Development and Integrated Management Approach

April 10, 2012

Tuesday 13:20-14:50

Ishikawadai 4 building – Room B04-05

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INTRODUCTION:

In main stream theory of development, development measured by “economic growth” was the main theme. The meaning of “development” in the context of international development had evolved during the past 30 years. From the lessons of 1980s, particularly represented by failures and mistakes in development field in Africa and Asia, “sustainable development” has become underlying concept to plan, implement and evaluate the development practices. In 1990, United Nations Development Program (UNDP) produced Human Development Indicators and gained world attention. This is to measure “development” from various aspects centering “human”. In this context, recent development projects require more integration of different fields, such as education, health, industry, economy, engineering, law and others. Given this background, it is increasingly important that young engineers must understand and be able to design sustainable development projects/programs to overcome precedent problems in development. These approaches often require the participants to create effective working relationships with practitioners in other field, governments, and organizations.

This course aims at introducing various approaches to sustainable development. The first half of the course looks at major theories of international development and how they are applied in practical situations. The latter part will take a close look at on-going development projects in selected countries with implication of role of engineering (and engineers). The students are expected to participate in discussion and analyze the project from engineering point of view within the context of “sustainable Development.”

TEXTBOOKS (Reading Materials):

Reading materials are selected from a variety of development study readers as well as different UN and Development Bank document and publications. Project document will be provided for the preparation of exercises and field study.

1. OECD-UNDP (2002), *Sustainable Development Strategies: S Resource Book*, Earthscan Publications, Ltd.
http://www.poptel.org.uk/nssd/res_book.html#contents
Book version is available at <http://www.amazon.co.jp> (ISBN: 1853839477)
2. Report of the World Summit on Sustainable Development (UN document)
<http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm>
3. Global Challenge Global Opportunity: Trends in Sustainable Development (UN document)
http://www.un.org/esa/sustdev/publications/critical_trends_report_2002.pdf
4. Agenda 21 (UN document)
<http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm>
5. Capacity 21: Building Capacity for Sustainable Future (UNDP document)
<http://www.undp.org/capacity21/docs/annual-reports/ar2000-en.pdf>

****Basic Readings**

1. “Human development – past, present and future” UNDP Human Development Report 2001, UNDP, Oxford University Press, 2001
<http://hdr.undp.org/reports/global/2001/en/pdf/chapterone.pdf>

GRADING CRITERIA:

Participation:

Students are expected read the assigned materials and answer the questions provided prior to the class. Class discussion will be based on the knowledge of the reading materials as well as your interest and experiences in development field.

Exercise Assignment:

Students are expected to do exercises assigned in class. Exercise assignments include individual exercise, group exercise, and presenting findings. For each component, main questions will be listed. Students are expected to read thoroughly assigned reading materials and analyze the issues according to the questions and prepare to present own ideas.

Group presentation:

In this class, on-going development projects will be introduced. You are expected to choose one project to contribute in the development of feasibility/sustainable study. Questions related to the project in various aspects are provided in advance and students are expected to answer questions with own ideas and to share experiences, if any.

WEEKLY SCHEDULE:

Week 1 : April 10	Introduction to the course In-class reading: FEATURE STORY Exercise 1: Sustainable Development
Week 2: April 17	Lecture/Discussion: <i>Development vs. Sustainable Development</i> Review on Development Reading & Exercise 2: Global Challenge Global Opportunity: Trends in Sustainable Development (UN document) http://www.un.org/esa/sustdev/publications/critical_trends_report_2002.pdf
Week 3: April 23	Lecture/Discussion: <i>Development models</i> Reading & Exercise 2 (Continued) Group Exercise : Your choice of category
Week 4: May 7	Lecture/Discussion: <i>Development models</i> Group Exercise : Your choice of category
Week 5: May 14	Lecture/Discussion: <i>Feasibility Study as a Tool of Sustainable development</i> Reading & Exercise 3: Sustainable Development and the Needs for Strategic Development http://www.poptel.org.uk/nssd/pdf/resource_book/SDStrat-02.pdf
Week 6: May 21	Development Projects in Lao PDR “Application of ICT to promote sustainable development of heritage site of Luang Prabang, Lao PDR.”
Week 7: May 28	Introduction to development project (1): Guest Speaker: World Heritage and Development
Week 8: June 5	Lecture/Discussion: Stakeholders Analysis Reading & Exercise 4: Analysis http://www.poptel.org.uk/nssd/pdf/resource_book/SDStrat-05.pdf
Week 9: June 12	Stakeholders Analysis (continued) Introduction to development project (2): Development Projects in Mongolia
Week 10: June 19	In-class Group Exercises
Week 11: June 26	In-class Group Exercises
Week 12: July 3	Group Presentation: Mongolian Team
Week 13: July 10	Group Presentation: Lao PDR Team
Week 14: July 24	Summary of the class Feedback
Week 15: July 30	(Extra class)