



Sirindhorn International Institute of Technology

Thammasat University, Rangsit Campus

Department of Common and Graduate Studies

TU130 Integrated Sciences and Technology Semester 1/2011

Course Coordinator: Dr. Thawatchai Onjun (Ext. 1807)

Sections

1	TU	09.00-12.00	Room 501
2	TH	09.00-12.00	Room 501

Project meeting: Consult with project advisor (2 hours/week)

Course Description

Basic concepts in science, scientific theories and philosophies, Standard methods for scientific investigations. Important evolutions of science and technology influenced on human lives. Impacts of science and technology on economics, societies and environments. Current issues involved with the impacts of science and technology on moral, ethics and human values.

Basis for Evaluation:

The final grade will be based on the following students' performance;

1. Lecture class attendance/quizzes	10%
2. Midterm Examination	20%
3. Final Examination	20%
4. Study of Dharmic Principles	5%
5. Project	45%
5.1 Project proposal/progress/attendance (15%)	
5.2 Project poster presentation (15%)	
5.3 Project report (15%)	

Note: Report should not exceed 10 pages, plagiarism will result in **'zero point'** for final report score

Class Policy:

1. Lecture class attendance will be checked by lecturer at a random time during the lecture.
2. Quiz after each lecture
3. Lecture class attendance of **at least 70%** is mandatory. Project (45%) and Final exam (20%) score will be automatically given as zero for student who fails to comply.
4. Project attendance (meeting with project advisor) of **at least 70%** is mandatory. Project (45%) and Final exam (20%) score will be automatically given as zero for student who fails to comply.
5. All Students are required to come to lecture class on-time, dress properly, and turn off any communication devices.
6. Discussion with project advisor is to be conducted in English.
- 7. Cheating on quiz, assignments, or exam results in a severe penalty.**

Important Dates:

June 20, 2011	Announcement of students group and project advisor
July 02, 2011	Last day for scheduling of meeting time with project advisor
July 14, 2011	Last day for proposal submission

September 23, 2011
September 19- 23, 2011

Last day for final report submission
TU130 Poster Exhibition week

Tentative Schedule

Week	Date		Synopsis of Lectures	Time
	Sec1	Sec 2		
1	June 14	June 16	Introduction to course <i>By Dr. Thawatchai Onjun</i>	9.00-10.20
2	June 21	June 23	Information searching <i>By Aj. On-Anong Suraniranat</i>	9.00-10.20
3	June 28	June 30	Biotechnology <i>By Dr. Siwarutt Boonyarattanakalin (BCET)</i>	9.00-10.20
4	July 5	July 7	Digital image processing for biomedical applications <i>By Dr. Toshiaki Kondo (EC)</i>	9.00-10.20
5	July 12	July 14	Introduction to business <i>By Suthathip Suanmali (MT)</i>	9.00-10.20
6	July 19	July 21	Energy and environment <i>July 19 by Dr. Bundit Limmeechokchai (MSME)</i> <i>July 21 by Dr. Supachart Chungpaibulpatana (MSME)</i>	10.40-12.00 09.00-10.20
7	July 26	July 28	Organic electronics <i>By Dr. Paiboon Sreearunothai (CGS)</i>	09.00-12.00
8	Midterm Exam: August 6, 2011 (20%)			
9	Aug 9	Aug 11	Next generation communication <i>By Dr. Prapun Suksompong (EC)</i>	9.00-10.20
10	Aug 16	Aug 18	Introduction to cryptography <i>By Dr. Nirattaya Khamsemanan (CGS)</i>	9.00-10.20
11	Aug 23	Aug 25	Pseudo science <i>By Dr. Jessada Denduangboripant</i>	9.00-10.20
12	Aug 30	Sep 1	Problems and future of construction Industry <i>By Dr. Somnuk Tangtermsirikul (CET)</i>	10.40-12.00
13	Sept 6	Sept 8	Nuclear technology <i>By Dr. Thawatchai Onjun (CGS)</i>	9.00-10.20
14	Sept 13	Sept 15	Carbon management technology <i>By Dr. Alice Sharp (CGS)</i>	9.00-10.20
15	Sept 20	Sept 22	Poster Exhibition Week <i>All group members stand-by at group's poster for evaluation.</i>	9.00-12.00
16	Sept 27	Sept 29	Biopolymers <i>By Dr. Pakorn Opaprakasit (CGS)</i>	9.00-10.20
17	Final Exam: October 8, 2011 (20%)			