EMP525 Technology Assessment

COURSE SYLLABUS

Spring, 2020

Jang I. Lee, Ph.D.

CLASS HOURS;	**09:00~11:50 SATURDAYS [ROOM TBA]**
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OFFICE:	**ACADEMIC BUILDING B306**
OFFICE HOURS;	**13:00~14:00 MON & WED OR BY APPOINTMENT**
CLASS WEB-SITE:	**CLASSROOM.GOOGLE.COM [ACCESS CODE TBA]**

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A. Course Overview

In 1972, U.S. Congress passed a law (PL92-484) authorizing the establishment of OTA(Office of Technology Assessment) with the purpose of 'identification and consideration of existing and probable impacts of technological application'. It further explained the needs of OTA as technology continues to change and expand rapidly which makes it essential that the consequences of technological applications be anticipated, understood, and considered in determination of public policy.

The idea of PL92-484 is more valid than ever when we consider the ever accelerating speed of technological changes (from incremental to disruptive). The consequences of rapid technological changes could be good or bad. To manage and steer this unrelenting advent of technology toward positive consequences require extraordinary efforts on technology assessment.

Based on the notion of PL92-484, this course will assume a 'problem orientation' premises and 1) review and understand the concepts, methods, and processes of TA, 2) discuss the design and implementation of TA projects, and 3) attempt to perform a TA based on a selected problem area.

B. Reading

Technology Assessment Reader (TBD)

C. Weekly schedule v.1

week	day	Subject(s)	Reading	Note
1.	02.29	Introduction and Overview - Level of Driving Automation	Syllabus note	
2.	03.07	TA: a conceptual review - selecting mode of transportation	Porter(1995). Technology Assessment	
3.	03.14	TA: Policy making instrument -History of OTA	Braun(1998) Chapter 2 OTA Legislation of 1972	
4.	03.21	TA: Managing Innovation	Betz(2011) Managing technological innovation (Chap. 8-9)	
5.	03.28	TA Methods I: Forecasting	Braun(1998) Chapter 5	**Proposal**
6.	04.04	TA Methods II: Cost-benefit analysis	Braun(1998) Chapter 5	
7.	04.11	TA Methods III: Risk analysis	Risk analysis primer	
8	04.18	TA Methods IV: Scenario analysis	Scenario building workshop	
9	04.25	TA Methods V: Communication	Consensus building workshop	**Progress**
10	05.02	University Adjustment day	No class	
11	05.09	Technology and Labor Market	TBA (Jobs and Skills) Containerization and Labor Union	
12	05.16	Technology and Politics	TBA Apollo Project Case	
13	05.23	Technology and Ethics	TBA MAD(Mutually Assured Destruction)	
14	05.30	Term Project Presentations		**Final rep**
15	06.06	Memorial day	No class	
16	06.13	TA: How to make decisions on emerging technologies		

E. Assignments & Evaluation

Items	**Points**
Term Project Term project proposal (03.28): 20 points + Progress report (04.25): 20 points + final report (05.30): 20points	**60 points**
TA Case Briefings Participants will present at least **3 TA case briefings** each of which will account for 10 points:: - Selection of TA Case should be consulted with the instructor prior to briefing - Briefing materials should be submitted to the instructor prior to briefing	**30 points**
Class participation/attendance ***** 5 points deducted per unauthorized absence	**10 points**
Total	**100 points**