Department of Humanities and Social Sciences

Course Profile

Course Number :**STS 306**	Course Title : **Sociology of Science and Technology**
Required / Elective : Elective	Pre / Co-requisites : -
Catalog Description:This course will focus on the sociology of science and technology. The construction of scientific fact and technological artifacts will be discussed by reading science and technology literature and field trips.	Textbook / Required Material : Vinck, D. (2010) *The Sociology of Scientific Work: The Fundamental Relationship Between Science and Society*, Edgar. Cheltenham. *The Social Construction of Technological Systems: New Directions in The Sociology and History of Technology*, ed. W. Bijker, T. Hughes, T. Pinch, The MIT Pres: Cambridge. Webster, A. (1991) *Science, Technology and Soicety: New Directions*, Rutgers University: New Brunswick, New Jersey. Latour, B. (1993) *We Have Never Been Modern*, Harvard University Press: Cambridge.

Course Structure / Schedule : **(3+0+0) 3 / 5 ECTS**

Extended Description : This course will focus on the sociology of science and technology. The construction of scientific fact and technological artifacts will be discussed by reading science and technology literature and field trips. Regular attendance is obligatory for this course. Students are responsible for reading and thinking about the assigned materials before coming to class, ask specific questions and make criticisms in class discussions. Each week, students will make a presentation about the topic of the week. There will also be a final project, about the social construction of technology. Sub-topics of the final project will be computer games, nuclear energy reactor controversy in Turkey and TV-computer hospitals. Students will select their sub-topic at the beginning of the semester and develop their project with the instructor.

Course Outline:

Week	Topics
1	Introduction
2	Principles of Modernity
3	Science and society: a complex relationship – Field Trip I *
4	The Institution of Science
5	The Sciences as Collectives: Profession, Disciplines, Regimes of Knowledge Production
6	Society's Influence on Knowledge Content

7	The laboratory in society and the question of democracy
8	Technology as Community, System and Organization?
9	The Social Construction of Facts: Or How the Sociology of Science and Sociology of Technology Might Benefit Each Other - I
10	The Social Construction of Bakelite: Toward a Theory of Invention - I
11	The Social Construction of Bakelite: Toward a Theory of Invention - II
12	Opening and Managing The Black Box of Science and Technology
13	We Have Never Been Modern
14	Wrap-up Discussion

Design content : none	Computer usage: No particular computer usage required

Course Outcomes:

	Program Outcomes	*Level of Contribution				
		1	2	3	4	5
1	Apply analytical and critical thinking skills to contemporary global issues.					*
2	Describe the interrelationships between science, technology, and society.					*
3	Describe the interrelationships between art, culture, and society.		*			
4	Explain the historical, political and economic conditions in which science and technology emerge.					*
5	Explain the historical, political and material conditions in which art and cultural expression emerge.				*	
6	Analyze how modes of thought are shaped by socio-cultural, historical, political and economic variables.					*
7	Apply discipline-relevant methods to HSS research assignments.					*
8	Summarize and assess current developments in their subject area.					*
9	Recognize ethical issues and social responsibilities in the contemporary world.		*			
10	Synthesize complex ideas in clear and concise ways.				*	
11	Generate creative solutions to local and/or global problems.				*	
12	Recognize relevance of coursework to personal experiences, lifelong learning, and job security.					*
13	Demonstrate an ability to function on teams.			*		
14	Demonstrate an ability to communicate effectively with written, oral and visual means.				*	

Recommended reading : -

Teaching methods : Class participation: Pre-class readings, lecture and class discussions, individual readings and team work for presentation.

Assessment methods : Attendance / Class Participation %30

Presentation %30

Final Project %40

Student workload:

Reading ..... 56 hrs

Lectures ..... 33 hrs

Class Discussion ..... 5 hrs

Project ..... 25 hrs

Presentation ..... 6 hrs

TOTAL …… 125 hrs . . . to match 25 X 5 ECTS

Course Category:

ISCED General Area Codes	General Areas	ISCED Basic Area Codes	Basic Educational Areas	Percentage
1	Education	14	Teacher Training and Educational Sciences	
2	Humanities and Art	21	Art	
2	Humanities and Art	22	Humanities	
3	Social Sciences, Management and Law	31	Social and Behavioral Sciences	60
3	Social Sciences, Management and Law	32	Journalism and Informatics	
3	Social Sciences, Management and Law	38	Law	
4	Science	42	Life Sciences	20
4	Science	44	Natural Sciences	20
4	Science	46	Mathematics and Statistics	
4	Science	48	Computer	
5	Engineering, Manufacturing and Civil	52	Engineering	
5	Engineering, Manufacturing and Civil	54	Manufacturing and Processing	
5	Engineering, Manufacturing and Civil	58	Architecture and Structure	
6	Agriculture	62	Agriculture, Forestry,	

			Livestock, Fishery	
6	Agriculture	64	Veterinary	
7	Medicine and Welfare	72	Medical	
7	Medicine and Welfare	76	Social Services	
8	Service	81	Personal Services	
8	Service	84	Transport Services	
8	Service	85	Environment Protection	
8	Service	86	Security Services	

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