



SECOND SEMESTER 2019-2020

Course Handout Part II

Date: 06-01-2020

In addition to part-I (General Handout for all courses appended to the time table) this portion gives further specific details regarding the course.

Course No. : BITS F399
Course Title : Humanistic Theories of Science and Technology
Instructor-in-Charge : Aswathy Raveendran

Scope and Objective of the Course:

Ways of considering the interrelationship among three of the major dimensions of our culture: its science, its technology and its humanistic orientation. Alternative ways of thinking about science and technology, diverse approaches of humanistic scholarship to studying science and technology, along with their historical sources. Approaches by social scientists to analyze technical fields of science and technology

Textbooks:

1. Sismondo, Sergio. 2004. *An introduction to Science and Technology Studies*. UK: Blackwell Publishing.

Reference material

1. Kitcher, P. (2003). Science, truth, and democracy. Oxford University Press
2. Allchin, D. (1999). Values in science: An educational perspective. *Science & Education*, 8(1), 1-12.
3. Achuthan, A. (2011). Re:wiring bodies. Bangalore: The Centre for Internet & Society.
4. Sur, A. (2011). Dispersed radiance: Caste, gender, and modern science in India. New Delhi: Navayana.

Course Plan:

Lecture No.	Learning objectives	Topics to be covered	Chapter in the textbook
1-8	To appraise the field of Science-Technology-Society studies, its key concerns and approaches.	Interactions between science, technology and society; ethical and political issues	RM 1: Chapter 1
9- 18	To reflect on the nature of science, and how philosophers and	Science and pseudoscience; science and alternative knowledge systems; debates on rationality and methods; values and science	TB chapter 1,3, 5, 6 and RM 2



	sociologists evaluate the nature of scientific knowledge.		
20- 28	To understand the nature of technology	What is technology? The relationship between technology, science and society	TB chapter 9
28-32	To explore the debates related to the public understanding of science	Public understanding of science, debates on science and technology in contemporary India	RM 3, TB chapter 15
33-41	To analyze the gender and minority question in science and technology	Gender, caste and race in science and technology- key issues	TB chapter 7, RM 4

NOTE: In addition to or instead of the textbook and reference material mentioned above, based on perceived need, students may be required to go through reference material made available at various stages of the course.

Evaluation Scheme:

Component	Duration	Weightage (%)	Date & Time	Nature of Component
Mid-semester exam	1.5 hours	30	4/3 9.00 - 10.30AM	Closed book
Assignment 1 and 2	-	30	To be announced	Open book
Comprehensive exam	3 hours	40	06/05 AN	Closed book

Chamber Consultation Hour: will be announced in the class

Notices: will be put up on CMS

Make-up Policy: Make ups will be granted only for exceptionally deserving cases.

Academic Honesty and Integrity Policy: Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

Aswathy Raveendran

INSTRUCTOR-IN-CHARGE

