



Birla Institute of Technology & Science, Pilani
Hyderabad Campus

SECOND SEMESTER 2018-2019
Course Handout Part II

Date: 07-01-2019

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: Biswanath Dash
Room No. C212
Email: biswanath@hyderabad.bits-pilani.ac.in

1. Objective and scope of the course:

This course will introduce ways of considering the interrelationship among three major dimensions of our culture-- science, technology and humanistic orientation. The main focus of the course will be to understand various theories that explain the relationship between science, technology and society. In the process, the students will learn alternate ways of thinking about science and technology, and will be encouraged to question the taken for granted ideas about scientific knowledge and technological artifacts.

2. Text Book:

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

3. Reference Material: Will be announced in the class.

4. Course Plan:

Lecture No.	Learning Objective	Topics to be covered	Text Book and Ref. material
1-2	Understanding the core concepts	Science, Technology, Humanities : their Interrelationship	TB Chapter 1
3-14	To get an introduction to various conceptual and key theoretical	Rationality- Key thinkers, Plato, Descartes, Chomsky etc. Empiricism- Francis Bacon, John	Reading materials



	debates concerning science and its method	Locke etc. Evolution of Scientific Method- Galileo, Newton etc.	
15-20	Develop a perspective on 'Science and Technology Studies' (STS)	Understanding growth of science- Popper and Kuhn Criticisms- Paul Feyerabend Synthesis: Lakatos	TB Chapter 2, Reading material
20-24	Gain a perspective on 'Sociology of Science'	Institutional view of science, Sociology of Knowledge and Introduction to Social construction	TB-Chapter 3-6
25-35	To critically analyze 'social constructivist' framework	Mutual shaping of science, technology and society. Social Construction of Technology; Actor Network Theory; Laboratory studies	Reading materials, TB Chapter 7,8, 9, 10,11,12
36-42	To reflect on critical and cultural studies of science and technology	Gender and science; Public Understanding of Science; Science Communication	TB Chapter 15 and 16, Reading materials

5. Evaluation Scheme:

EC No.	Evaluation Component (EC)	Duration	Weightage	Date, Time and Venue	Nature of Component
1.	Mid Semester Test	90 min	30%	15/3 9.00 - 10.30AM	Closed Book
2	Assignment 1 & 2		30%		Open Book
3.	Comprehensive Examination	180 min	40%	10/05 FN	Closed Book

6. Course Notices: Notices, if any, will be displayed on Department Notice Board and CMS.

7. Make-up: For the components of the evaluation, makeup will be allowed on the basis of documented proof to support the case. If you have a personal or medical emergency, provide copies of the appropriate paperwork to your instructor as soon as you can. Missing a due date, forgetting an assignment, or simply getting behind is not a valid reason.

8. Plagiarism: Please be aware that cutting and pasting from websites is considered plagiarism. Students are advised to document all sources. If you are not sure that you need to document a source, then please ask the instructor. Any hint of plagiarism in assignment will fetch a zero.

9. Chamber consultation: Thursday 11-12.



10. 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.

Biswanath Dash

INSTRUCTOR-IN-CHARGE

