



**FIRST SEMESTER 2020-2021**  
Course Handout Part II

Date: 17-8-2020

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 F214**  
Course Title : **Science, Technology and Modernity**  
Instructor-in-Charge : **Biswanath Dash**

**Scope and Objective of the Course:** The course is aimed at exploring the interrelationship between modern society and science/ technology. Specifically, it seeks to interrogate the relationship in terms of analyzing emergence of modern science in the western world and its implication and contribution to the idea of a modern society. It covers to an extent, the impact of such development in India and examines the contemporary debates over the role of science/technology within modernization and globalization.

**Textbooks:**

1. McClellan III, J.E. and Dorn, H. 2006. *Science and Technology in World History*, Second Edition, Maryland: John Hopkin University Press

**Reference books**

1. Reading material to be uploaded on CMS
2. Bernal, J.D. 1971 *Science in History* Vol. 2. Massachusetts: MIT Press

**Course Plan:**

Lecture No.	Learning objectives	Topics to be covered	Chapter in the Text Book
1-2	Gain an overall perspective of the course	Course Structure Science and Technology in Global Context	TB Part I
3-15	Learn about origin and evolution of Natural Philosophy/Science in different cultures	Greek Natural Philosophy, Arabic Middle Ages Chinese and South American Civilization	TB Part I and II  Reading Material



16-25	Examine emergence of modern science and its role in industrial revolution in the western world	European Renaissance Scientific and Industrial Revolution	TB Part III and IV
26-34	Analyze evolution of Science/ Technology in India and to examine forms through which values and belief of modern society shape science and technology	Vedic period Gupta era Moghul period Colonial India	Reading material
35-42	To reflect on how scientific and technological progress have shaped modern societies, role of capitalism and some critique	Traditional and Modernity, Rationality and modern society Risk society, Modernity and Globalization Critique of modernity	Reading material

#### Evaluation Scheme:

Component	Duration	Weightage (%)	Date & Time	Nature of Component
Test I	30 Minutes	15	September 10 – September 20 (During scheduled class hour)	Open Book
Test II	30 Minutes	15	October 09 –October 20 (During scheduled class hour)	Open Book
Assignment	Take Home	20	1 <sup>st</sup> Sep- 5th October	Open Book
Test III	30 Minutes	15	November 10 – November 20 (During scheduled class hour)	Open Book
CE	120 minutes	35	As in Time Table	Open Book

**Notices:** Notices will be displayed on CMS.

**Chamber consultation:** Thursday 4-5 pm. A Google Meet link will be shared on the CMS.

**Make-up Policy:** The make-up for an evaluation component will be given only in genuine 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.

**Biswanath Dash**

**INSTRUCTOR-IN-CHARGE**

