Course Instructor: Shefali Jha (shefali_jha@daiict.ac.in)

This course is designed to encourage students to understand, explore and analyse ways in which science and technology relate to society. Science and Technology Studies (STS) is a growing field of study around the world that seeks to understand how science and technology shape human lives and livelihoods, and how society and culture, in turn, shape the development of science and technology.

Objectives and Outcomes
STS seeks to provide insights into the deep relationship between science and technology and such basic categories of social thought as race, gender, class, the environment, democracy and development, and human rights, by focusing attention on science and technology as social institutions. This course, in other words, intends to introduce students to some of the key philosophical, sociological and historical approaches towards understanding the workings of science and technology in our times.

By the end of the course, it is expected that students will have the conceptual tools and vocabulary to think about the meanings of science and technology in varied social, political and cultural contexts. They will be able to generate critical discussion around the impact of STS on their received ideas about science, and reflect upon their own professional goals and practice going forward.

Course Structure and Content
The course will be organized around four units, consisting of class lectures, discussion, and presentations. The first unit will map the broad field of STS. Students will be introduced to some of the historical and sociological approaches to the understanding of science and technology. They will be introduced to the ideas and works of some of the key thinkers and writers in this field and the nature of contemporary debate on the subjects raised by them. In these lectures we will explore basic questions about what modern science is, the relationship between science and technology, and the role of historical, sociological and anthropological studies of science and technology in helping us think about these questions.

Following this broad introduction to STS in Unit One, in Units Two and Three, students will be introduced to debates on science and technology in the Indian context. Class lectures and reading in Unit Three will focus on the structural impacts of colonialism, developmental planning and liberalization on the growth and development of Indian scientific and technological endeavours in different domains. Unit Three will focus specifically on debates around health, disease and medicine in India. Together, these units will allow us to analyse the contemporary moment, and explore frameworks that seek to make sense of it.
In Unit Four students will be encouraged to take up the theoretical questions raised in Units One to Three, and pursue a short research study as a Group Project. The focus will be on the ways in which Covid-19 has impacted our collective lives, by introducing new objects and vocabularies and transforming old and familiar objects around us. Details of specific topics and process of study will be provided in time, along with appropriate material in the form of e-resources, books, articles, talks etc. These will be kept in a common repository that can be accessed by all.

Class Organization
The entire class will be randomly broken up into groups of 15 students on an average, and a student assigned to a group will remain in it throughout the semester. The group leader (either elected or a volunteer) must provide the name, ID numbers and e-mail addresses of all members by the second week of the course. It will also be his/her responsibility to interface with the faculty on behalf of the group, and to make sure that the assigned tasks are undertaken efficiently and on time.

TAs for the course will coordinate all Group related issues.

Course Material
All the relevant reading material will be made available in a Google Drive Folder for the class. The following books will be the basic texts for the course:


Reading Tips
Find answers to the following questions:

- What is the reading about?
- What is the specific argument the author intends to communicate?
- What methodology does he deploy to build up his argument?
- What are author’s sources and points of reference?
- Can you relate the author’s views with your own understanding of the issue?
- What are the difficulties you have while reading? (Words, ideas, lack of context could all be sources of difficulty—note these down while reading and ask for help).

Evaluation
Evaluation will be based on in-class presentations, group project and an end-semestexam. 10% of your final marks will come from class presentations, 40% from the group project, and 60% from the end-semester examination.

Participation points: Students with more than 85% attendance will receive an extra 5 marks, to be added to their total at the end of the course. Participation in class discussion— by asking relevant questions and/or making helpful observations— will also be considered for additional
marks to be awarded in consultation with the TAs at the end of the course. This will be purely at the discretion of the instructor.

**Honour Code**
Academic dishonesty, cheating, plagiarism—any kind of deceit—will not be tolerated, and will result in a zero for the assignment. All ideas and words that you did not generate yourself must be cited in your papers. In extreme cases, I reserve the right to assign a failing grade for the course or a specific assignment if you are caught cheating, or inappropriately copying-and-pasting content from external sources without acknowledgment.