

## **HS 312 Introduction to Science and Technology Studies**

Spring Term 2024-25

Course Instructor: Mahendra Shahare  
Room Number 118-F  
Department of Humanities and Social Sciences  
Indian Institute of Technology Bombay

### **Course Description:**

The course will introduce key themes in the field of Science and Technology Studies (STS). This reading intensive course is aimed at students who are interested in critically thinking about – scientific knowledge production processes and the design of technologies – from a broader social perspective. Using a mixture of theoretical concepts and case studies, students will learn to reflect on interconnections between science, technology and society. Some of the central ideas and questions that would be discussed in this course include:

- How scientific knowledge and technological artefacts are constructed?
- How do technoscientific and social phenomena interact and influence each other?
- In what ways technologies mediate our perception of reality?
- How gender, race, and other social inequalities are reproduced or amplified by technologies?
- How do we distribute the risks and benefits of S&T?
- How can the public govern and influence the trajectory of scientific research?

### **Administrative Details:**

Class slot 5: Wednesday 9:30-10:55 am, Friday 9:30-10:55 am

Classroom Location: ESE 104 (Offline)

Contact: mahendra@hss.iitb.ac.in

Office hours (offline): Friday (11:00-12:30)

Readings and sourcebooks will be available through Moodle. I will be available in my office between 11 am to 12:30 pm every Friday, through the semester. You could drop in – for anything ranging from a casual chat to a serious discussion on issues that I discuss in the class. An e-mail before you come would be appreciated but is not mandatory. I am particularly anxious about those who have difficulties in language. The sooner I get to know of your difficulties, the easier it will be to address the same.

Please do let me know if you have any accessibility requests regarding the conduct of this course. These could include, but need not be confined to, the availability of readings in different formats, visual aids, approaches to discussion boards, Moodle, teaching aids, software, other resources. Confidentiality will be ensured. The course will strive to make reasonable accommodations. Please, please let me know at the soonest.

### **Attendance:**

Attendance is compulsory. DX grade will be enforced. Students will be awarded up to 5 **bonus marks** over and above 100 for above average attendance (5 marks for > 95%, 3 marks for > 90%, 2 mark for >85%, and 1 mark for >80%,). Students with less than 80% attendance will not be permitted to write the end-semester exam and would be awarded DX grade. In exceptional case (but not below 65% attendance), at the instructor's discretion, you might be permitted to write the exam but with grade down penalty.

**Evaluation Policy:** The grading would be relative, subject to moderation. The pass mark is fixed at **40%**. Below 40 is a clear fail (FR). FF is not on offer.

Components (tentative – to be finalised in the second week):

1. Individual participation and presentation – (8 marks)
2. Group project presentation & report – (12 marks)
2. Mid-semester examination (30 marks – 10 marks MCQ + 20 marks Descriptive questions)
3. End-semester examination (50 marks – 15 marks MCQ + 35 marks Descriptive questions)

Attendance policy is also applicable to all course Audit students. To get **Audit Pass** you must score 30 marks.

All submissions and assignments must comply with IITB academic integrity policy. Instances of plagiarism, cheating, *cogging*, or other misconduct will result in disciplinary action and a grade of zero for the affected assessment.

If you find the evaluation policy as strict and unjust, please read an IITB Insight article here ( <https://insightiitb.org/volume-10-3-whats-wrong-with-us/> ) and drop down for a chat during my office hours.

#### **Source Books:**

1. Sergio Sismondo, *An Introduction to Science and Technology Studies*, 2nd edition, Wiley Blackwell, 2010.
2. Harry Collins and Trevor Pinch, *The Golem: What You Should Know About Science*, 2nd edition, Cambridge University Press, 1998.
3. Harry Collins and Trevor Pinch, *The Golem at Large: What You Should Know About Technology*, 2nd edition, Cambridge University Press, 1998.

**Wish you all a very fruitful semester**