Learning Objective:

This is a thematic survey in the history of science and technology. Students are expected to explore diverse historical problems in science and technology in the global and local contexts. Through this course, students will be able to understand the importance of science and technology in creating modernity. They are also expected to learn how science and technology are located in the cultural landscape of our society, which shapes and is shaped by knowledge and practice in laboratories, factories, and fields. Students will thus find that science and technology are closely associated with what we do not usually think in related terms, such as religion, political ideologies, morality, gender, entertainment, and even magic.

Course Structure:

2 Hour Weekly Lecture + 1 Hour Weekly Tutorial

Assignment and Evaluation:

Lecture Attendance and Quiz (15%)
Lecture Participation (5%)
Midterm Essay (15%) – by 7 March
Tutorial Activity (15%)
Final Exam (50%) – on 29 April

Lecture Readings

Week 1 (15 January): Course Introduction and the Stories on Ancient Societies

Week 2 (22 January): Science in the Medieval Islamic and European World

Week 3 (29 January): Early Modern Sciences and Their Revolutions

Week 4 (5 February): Science, Technology, and the Enlightenment Project
Hasok Chang, “We Have Never Been Whiggish (about Phlogiston),” *Centaurus* 51 (2009), pp. 239-264.

Week 5 (12 February): Industrial Revolution
Week 6 (19 February): Darwinism and Imperialism

Week 7 (26 February): Second Industrial Revolution

Week 8 (11 March): Science and Technology in Russia and the Soviet Union

Week 9 (18 March): Science and Religion

Week 10 (25 March): Science, Technology, and Gender

Week 11 (1 April): Pseudoscience in Cultural Contexts


**Week 12 (8 April): Science and Technology as a Threat**


Amy Bix, Inventing Ourselves Out of Jobs? (Baltimore: Johns Hopkins University Press, 2000), chapters 1, 7, 8.


**Week 13 (15 April): Popular Science**


**Tutorial Readings**


**Midterm Essay**

The professor will assign a topic in the form of a question during the lecture. Students are expected to write an essay about it using course readings and other resources available. The content of the paper must answer the question with approximately 1,000 words, excluding footnotes and bibliography. The recommended style of the essay can be found in *Chicago Manual of Style* (available in the NTU Library). You should submit your paper to the course portal of NTULearn. After logging on, please click “Midterm Assignment.” Please submit your paper by 7 March. Any late submission, along with overly long or short papers, may be subject to penalty. Please submit your file in .docx (MS word) rather than .pdf format.

**What You Should Do before and during Lectures:**

There will be a quiz during every lecture. This will also be used for monitoring attendance. The quiz will be based on the week’s lecture readings which will be explained by the professor. Even if you do not choose the “correct answer” (only in terms of class context) for the quiz, your attendance in the lecture will still be acknowledged. But getting the right answer will let you earn extra marks (total 15%). To do so, you need to pay attention to the lectures and read the papers. Please read as much as you can, but you do not need to finish all. What you need is just to pay attention to the lecture out of which the quiz questions will be chosen. In addition, the professor will occasionally ask questions amid the lecture. You are encouraged to answer these questions and ask your own to earn credit for your “lecture participation” (5%).

**Tutorials:**

There are three tutorial sessions, and you need to attend just one. During the class, tutors will interact with students to talk about a paper for your better understanding of the week’s subject. You are encouraged to be active during the tutorials, since your attendance and activity will be monitored and will contribute to your marks. You need to submit your discussion reports at the end of each tutorial (15% of the total).

**Final Exam:**

On 29 April 2020, you will take the final exam. There will be five questions reflecting the five weeks out of 13 weeks of lectures and tutorials. You will have to write down an analytic essay for each question. This is an open book exam.
How to Find Readings:

The main textbook is available in the campus bookstore, while other lecture readings and tutorial papers are available in NTULearn’s course portal.

Plagiarism:

Plagiarism is a serious academic misconduct and may endanger a student’s career in a highly severe way. It is done intentionally or unintentionally using another person’s ideas and writings without any proper citation and/or quotation marks. Collusion, which may involve a close collaboration in completing an assignment, is another problem. Unless instructed otherwise, your midterm assignment should be done by yourself alone. Paraphrasing is an act of rewriting other people’s ideas or arguments using your own words. While this is an acceptable practice in most cases, it can be an issue if you do not indicate that the ideas have come from another person’s works. If you are not sure about how you should do regarding these issues, please do cite the referred sources in footnotes/endnotes and use the quotation marks around the terms you did not originally write. Even if you cited the source, your paper can be a problem without the proper use of quotation marks. If any plagiarized sentence or paragraph is detected, the grade will be reduced to zero.