Course Title: Technology, Environmentalism and Sustainable Development

Course No: (Optional) Credits: 4 (four)

Faculty in Charge: Dr. Rohan D’Souza

Mode of Evaluation: Term Paper: 2 credits

One tutorial submission: 1 credit

Two written class assignments and class presentations: 1 credit

Instruction Mode: Lecture-cum-seminar.

This course is designed for students in the M.Phil/PhD programme. It is intended to be an interdisciplinary effort: aimed at introducing students to specific critical debates in contemporary concerns on technology, environmentalism and sustainable development (TESD). The emphasis is on relating issues in technology studies and environmentalism to the broader debate on sustainable development.

Three broad concerns will be addressed:

1) Development and sustainability and the environmental challenge

   The notion of ‘Sustainable Development’ marked a significant moment in questioning ideas on economic development. By taking up the challenge of ‘sustainability’, enthusiasts for economic growth and national development had to reconsider issues such as ecological limits, technology choices, pathways to modernization and the political consequences following economic growth. The term sustainable development, however, is a much contested, contradictory and often perplexing challenge. This section will look at:

   a) debates on sustainable development (from Stockholm to Rio)
   b) recent framings of development
   c) explore practices that attempt to forge alternative development outcomes

2) Environmental politics and the production of nature

   Under this theme, the political shaping of the environmental critique/challenge to development and its attempts to define alternatives will be discussed. Writings on formulations such as political ecology, liberation ecology and green development (to name a few) will be explored. To illustrate the many sided aspects of this debate and to work towards an empirical context as well, critical readings on the development and environment tension in India will be explored.
3) Technology and the challenge from non-equilibrium ecology

The study of modern technology as a collection of techniques for domination and as a means for upsetting ecological processes is now well documented. Locating and specifying the democratic possibilities for modern technology, in effect, has become a critical question for the notion of sustainable development. Through this theme, I will be sensitizing students to a range of views by pessimists on modern technology. To also provide context to the explorations on modern technology, we will attempt to club this theme with the debate on non-equilibrium ecology. Since the 1980’s a radical challenge has been initiated against what is now termed as the orthodox or classical reading of ecosystem ecology. Advocates for non-equilibrium ecology are credibly arguing that the natural world involves understanding innumerable gradients for recurring change. Thus, instead of trying to seek a balance in nature, ecologists must now try and understand processes involving oscillations, disturbances and instabilities. Nature in other words is made up of a web of unstable patches rather than a set of ecosystems in balance. Non-equilibrium ecology has consequently posed a whole range of questions to development concerns.

**Structure and Teaching Methods for the Course**

Students will be required to prepare in advance for the lecture, by reading the articles and books chapters listed in the course-outline. Each set of readings will be prefigured with a theme question.

I expect students in this course to be involved in an intense reading and writing effort. Besides class participation, there will also be class assignments (two, 800 words each), one tutorial (with tutorial discussion, 1500-2000 word maximum) and a term paper (submitted at the end of the semester, 2500-3000 words).

First assignment after week two. The second assignment after week four. Tutorial after week-six and title for the term paper after week-ten.

**Lectures**

#1) Week One

What defines underdevelopment?

*Readings*

Read essays by Paul A. Baran (pp.75-92); W.W. Rostow (pp. 154-88); Simon Kuznets (pp. 135-153); Henry J. Bruton (pp.219-244); Ragnar Nurkse (pp.256-271); W. Arthur Lewis (pp.400-449); Hollis B. Chenery (pp.450-471)


#2) **Week Two**

Was “progress” the promise of development?

*Readings*


#3) **Week Three**

Does the idea of ‘Governmentality’ help explain the power of development?

*Readings*


#4) Week Four

According to Keith Tribe “Classical liberalism called upon the government to respect the market, to refrain from intervention. Neoliberalism deploys the market to measure and assess state activity. It is a sort of permanent economic tribunal confronting government.” (p.693) Is Governmentality a critique of neo-liberalism and globalization rather than simply a challenge to the idea of ‘development’?

**Readings**


#5) Week Five

Do you think that modern technology produces ‘docile bodies’?

**Readings**


#6) **Week Six**

Is Fordism, as a technological matrix, different from the Factory?

**Readings**


# 7) **Week Seven**

In your opinion, is Mumford’s Megamachine different from Marx’s large scale Industry?

**Readings**
#8) Week Eight

Once the capitalists are gone, advanced technology will provide the objective conditions necessary for “that high stage of development of Communism” What was Lenin, or for that matter Marx, thinking of here? Discuss

(Langdon Winner discussing Lenin in Autonomous Technology)

Readings


#9) Week Nine

What according to Martin Heidegger is the meaning of ‘Modern technology’

Readings

**# 10) Week Ten**

Do you think Marxist writings on Nature provides greater political clarity on questions of control, domination and exploitation of the natural world?

*Readings*


**#11) Week Eleven**

Would you agree with Botkin that we should “begin to observe nature as it is, not as we imagine it to be” in order to conserve or protect nature?

*Readings*


#12) **Week Twelve**

**Is there a credible critique of Political Ecology and Environmentalism?**

**Readings**


