

## STS 501: Proseminar in Science and Technology Studies (STS)

Professor Alan Richardson (Philosophy/STS)

Fall Term

Mondays 2-5 pm

BUCH D324

NB: This course is, so far, in-person but if you have special circumstances that mitigate against in-person instruction, we can talk about alternative arrangements.

STS 501 is a required course for all STS graduate students and it welcomes any other graduate student who might be interested in a grounding in the STS literature. No background in STS is assumed.

Much of the daily news these days is taken up with stories that illustrate some of the key themes of the past fifty or so years of the STS literature. The climate crisis and the pandemic have placed questions of the scope and limits of scientific knowledge, divided expertise, the place of values in scientific modelling, and the place of scientific knowledge in policy making at the very centre of our civic lives. Issues in data science, machine learning, and Big Tech, meanwhile, have brought questions of the use of technology for data extraction and social control, the ability of algorithms to elude human bias, and the private ownership of social infrastructure into urgent focus. Meanwhile, universities, including UBC, wish to be seen as engaged in an expansion of knowledge-making projects through an embrace of decolonizing, Indigenizing, and other equity-enabling methods and perspectives; however laudable and necessary, these efforts raise questions about the unity of knowledge and the nature of the knowable world.

This version of STS 501 seeks to ground students in some of the central themes of 21<sup>st</sup>-century STS, with a particular focus on the questions involved in governmental efforts to “following the science” during critical time periods such as world-wide pandemics and global climate emergencies. After a couple of background weeks to lay several issues on the table, we will be introduced to a new key term each week. At the end, we will see if and how the key theoretical terms in the understanding of science in recent STS help us to understand better the crisis of knowledge and action of our times.

Key Terms include: Scientific Knowledge; Doubt, Uncertainty, Controversy; (Social) Construction and Co-Production; Objectivity; Objects and Ontologies; Expertise; Values, Interests, Norms; Politics, Governance, Science Policy; Scientific Communication; the Cognitive and Political Goals of STS itself. Readings from a wide range of historians, sociologists, philosophers, anthropologists, and rhetoricians of science and the occasional scientist.

Students will give a seminar report, write several responses to the readings to help shape our in-class discussions, and write a final research paper or other relevant piece of work, which they will discuss as a work in progress during the final two weeks of class.