

SPRING 2012 TEAM-TAUGHT COURSES

VOTING AND DEMOCRACY



Instructors: Casey Dominguez and Cameron Parker

Disciplines: Political Science and Mathematics

Democracy is based on the idea that individuals' preferences can be aggregated to make decisions for the group through the voting process. However, the assumption that preferences can be consistently and fairly aggregated has shown to be false in a number of situations. This course will examine the mathematical reasons why the basic requirements for voting systems necessarily lead to paradox, and the political ramifications of these problems for the democratic legitimacy of rulers.

This course will focus on two areas in which voting systems can fail, addressing first some mathematical paradoxes of preference aggregation, and then some political science implications of it. It will discuss political examples in several countries, including the United States.

DIGITAL REPRESENTATION IN ARCHITECTURE



Instructors: Simon Koo and Daniel Lopez-Perez

Disciplines: Math/CS and Art/Architecture

Historically, the relationship between architecture and geometry has been a primary focus of research, seeking new means for formal and structural innovation. Today, the digital medium is having an extraordinary effect on this relationship, enabling unprecedented advances in the production of architectural form. On the one hand, the digital medium has empowered architects with an almost endless array of formal possibilities. On the other hand, a growing need to understand the geometrical basis for these forms has emerged in order to classify and ultimately find novelty amongst them.

This course aims to build a dialogue between architecture and geometry in order to inform the production of digital forms. The use of a digital platform made up of two computer aided design packages, Rhino and Matlab, will serve as the forum for this dialogue. A geometric vocabulary will be build in the form of a catalogue that can serve to both clarify the existing production of digital forms and ultimately find new ones.

PRISON: COMMUNICATION AND CULTURE



Instructors: Jonathan Bowman and Erik Fritsvold

Disciplines: Communication Studies and Sociology: Crime, Justice, Law & Society

This course marshals cornerstone communication studies theory as a lens into understanding the dynamic and contentious lived experience of prison culture. This interdisciplinary, cross-cultural, critical investigation of prison culture demands a mastery of the seminal theoretical perspectives on group formation and interaction within and beyond the incarceration experience.

America has nearly 2.4 million people behind bars, including roughly 1.6 million in state and federal prisons. There is a bountiful legacy of scholarship that examines the power dynamic, lived experiences and culture behind bars; in short, culture and communication matter. Yet, the subtle nuances of prison life are oft misunderstood by the general population. Prison is sometimes viewed as a different “world” by the unincarcerated, and yet many of the complex social interactions follow similar patterns to those studied in more traditional cultures outside the prison walls. This course will use communication theory from a small group and interpersonal perspective to allow understanding and explanation of the unique way that communication—and general social interaction—shapes one’s experience upon incarceration. From initial first-impression stages of relationship development to the complex ways that people structure and negotiate impressions in order to send messages to perceived “others,” communication theorists have much to say about the nature and structure of communication events within the contraventions of the prison system.

INTERDISCIPLINARY SEMINAR IN ENVIRONMENTAL STUDIES



Instructors: Ron Kaufmann, Lance Nelson and Mark Woods

Disciplines: Environmental Studies, Theology and Religious Studies, Philosophy

This course will explore globally significant environmental issues using perspectives from religious studies, philosophy and the natural and social sciences. Responses by people, organizations and governments to environmental challenges are informed by many factors, including faith traditions, philosophical thought, values, socioeconomic conditions and scientific data. Understanding the nature of human responses to environmental issues and forming well-reasoned positions about courses of action requires solid knowledge of the religious, philosophical, social and scientific aspects of the issues being considered.

This course will consist of formal lectures and in-class discussions. Lectures will be presented by the three instructors, as well as by guest speakers with expertise in other disciplines (e.g.

Sociology, History, and Economics). In addition to formal class time, students will travel to the Dominican Republic during Spring Break to experience firsthand the environmental and social conditions in a developing nation. (Note: Students must pay additional travel cost.)