Society in Silico

Weekly outline

General

Time: 2a: MW 9:50-11:00, F 9:40-10:40 (except week 1)

Location: Weitz 231

Instructor: Greg Marfleet, Willis 406, 222-4116

Office Hours: T 1:30 - 3:15, F 12-3:30

Description:

Can models help us understand the social world? Vexing issues like segregation, economic inequality, corruption, market failure, resource over-exploitation, genocide, insurgency and terrorism have inspired scholars to ask if computational models of social systems can shed light on the hard-to-observe micro processes underlying macro problems. In this course we will explore the conceptual and empirical foundations of modeling especially in complex systems. We will read about, then experiment with, existing models while students learn to program their own using open-source software.

Texts: None, this is an article-based course. See below for readings each week

Assignments:

Issue Reading Response Papers (x7) 5pts each -- 35

Issue-Model Modification and Analysis Paper (including rewrite) -- 20

Group Model Project and Presentation -- 30

Participation and Attendance – 15

11 September - 17 September

Monday

Introductions, Course Outline and plan

Considering the Liberal Arts

Readings:


Wednesday

How Models, Theory and Observation Intersect:

Readings:


Friday

Introduction to Netlogo and Code Assignment

18 September - 24 September

Monday

Social Segregation

Reading:

Katie Nodjimbadem smithsonian.com 2017 The Racial Segregation of American Cities Was Anything But Accidental


Wednesday

Segregation Model Reading:


Explore Netlogo Model in Library

Friday

NetLogo Coding Activity

Modeling a Standing Ovation

2017 A & I Convocation: Friday, September 22nd. Elizabeth McKinsey, Maxine H. and Winston R. Wallin Professor of American Studies and English
Week 2 Reading Response Paper Assignment

NOTE: All reading response papers are due on Monday before class.

25 September - 1 October

Monday

Income Inequality

Readings:

John Cassiy 2014 The New Yorker Forces of Divergence


Wednesday

Inequality Model Reading:


Explore Sugarscape

Friday

NetLogo Coding Activity

Hill Climbing Code Activity

Week 3 Reading Response Paper Assignment

2 October - 8 October

Monday

Globalization

Readings:


John Micklethwait, and Adrian Wooldridge 2009 foreignpolicy.com-Think Again The Globalization Backlash

Wednesday
Globalization Model Reading:


Explore Dissemination of Culture Model

Friday

NetLogo Coding Activity

Go Fish Lists Tutorial

Axelrod Culture Model 6.0 File Uploaded 4/10/17, 09:36

Week4 Reading Response Paper Assignment

This week

9 October - 15 October

Monday

Ethnic Conflict and Genocide

Readings


Kelly McEvers 2012 Washington Monthly The Crackdown

Wednesday

Genocide Model Reading:


Explore Rebellion and Genocide

Friday

Netlogo Coding Activity

Week 5 Reading Response Paper Assignment

16 October - 22 October

Monday

No Class- Mid Term Break
Wednesday
First half reflection, Research Discussion

Friday
Group Project Workshop
   23 October - 29 October

Monday
Corruption and Society
Readings:
   OECD 2016 Putting and End to Corruption
   Paul Star 2009 The New Republic Goodbye to the Age of Newspapers (Hello to a New Era of Corruption)

Wednesday
Corruption Modeling Article

Friday
Netlogo Coding
Week 7 Reading Response Paper Assignment
   30 October - 5 November

Monday
Commons Dilemmas and Resource Exploitation
Readings:
   David Sloan Wilson 2016 evonomics.com-The Tragedy of the Commons: How Elinor Ostrom Solved One of Life’s Greatest Dilemmas
   Mark Sagoff 2017 Climate change is not a tragedy of the commons - Learnliberty.org

Wednesday
Commons Model Reading

Julia Schindler (2012) Rethinking the Tragedy of the Commons: The Integration of Socio-Psychological Dispositions Journal of Artificial Societies and Social Simulation 15 (1) 4

Friday

NetLogo Coding Activity

Week 8 Reading Response Paper Assignment

6 November - 12 November

Monday

Economic Bubbles and Crashes


Wednesday


Friday

Netlogo Coding Workshop

Week 9 Reading Response Paper Assignment

13 November - 19 November

Monday

Group Presentations I

Wednesday

Group Presentations II