

Sociology 554a&b
Research Topics in Human Nature and Social Networks

Thursday 12:30–2:00 p.m.
Fall & Spring Terms 2017/2018
Location: 17 Hillhouse Ave., 393A

Nicholas A. Christakis, MD, PhD, MPH
Goldman Professor of Social and Natural Science
Department of Sociology
Department of Ecology and Evolutionary Biology
Department of Biomedical Engineering
Department of Medicine
Yale University

Telephone: (203) 436–4747

Email: nicholas.christakis@yale.edu

Website: <http://www.NicholasChristakis.net> or <http://www.HumanNatureLab.net>

Twitter: @NAChristakis

Office hours: Thursday, 4:00–6:00 p.m., or by appointment, in Room 303, 17 Hillhouse Ave.

Course Description:

The course is designed to be a part of the graduate curriculum, but is also open to undergraduates with permission from the instructor. The class offers half a credit each semester. Meeting weekly throughout both the fall and spring terms, it constitutes an ongoing seminar dedicated to exploring fundamental aspects of network science and biosocial science by exposing students to work in the Human Nature Lab, and to visiting speakers discussing topics of interest to the lab. Some work in the lab involves the use of large-scale, online experiments. Other work involves large-scale field trials in the developing world. Still other work examines the biological determinants and consequences of social network interactions, with a particular emphasis on the genetic origins and implications of human network interactions.

Typical topics covered every semester include social network analysis, social psychology, experiment design, “big data” analysis, behavior genetics, social epigenetics, and diverse other topics. The research discussed has implications for diverse behavioral and policy interventions. Discussions in the workshop range widely among methodological, theoretical, empirical, and normative issues. Sessions alternate between presentations by students and other lab members of their own work and by visitors.

This class is a topical seminar, meaning that the material covered each semester will vary, driven by the work currently undertaken in the Human Nature Lab, by student interest, and by fresh scientific discoveries relevant to our work. As a result, the topics covered, and the presenters, will vary each semester. An illustrative set of recent topics from a recent semester is laid out below. Any updates will be posted on the course website and Classes*v2 and will be communicated during seminar.

Course admission:

The seminar will be limited to 15 students because of the limited lab space availability. Selection will be based on submission of a short essay to be completed shortly after the introductory lecture, with undergraduate priority given to seniors and juniors.

In the short admission paper, tell us about yourself (major, year, interests, future goals) and why you are interested in network and biosocial science, and more specifically, why you are interested in this seminar.

Admitted students will be notified and asked to confirm enrollment by the following day.

Readings:

Readings for each session will be assigned as the semester progresses depending on seminar topics.

Grading:

As this is a seminar style course, regular attendance and active participation in the discussion are required and will make up 50% of the final grade.

Seminar response papers will comprise another 25% of the grade. After three class sessions, a student will submit a short essay (one page) describing their observations of the meeting. Students will submit three seminar response papers total.

For the final 25% of their grades, students can choose either a research paper or an oral presentation. Topics will be chosen with instructor approval.

Those students choosing a final paper will submit a 10-page research essay on a current topic in network science. Students should cite at least ten peer-reviewed scientific journal articles. We are looking for innovative ideas, the quality of scholarly literature review, and clarity and organization. This paper will be due on the last class meeting.

Students choosing presentations will prepare original research proposals following a standard scientific format to explore. It is essential that this proposal makes clear a thesis that could be advanced or question that could be addressed. The proposal should cite at least five empirical research papers to demonstrate that there is adequate support for the proposal in the literature. Students will present their proposals during a class session in November or December, and will sign up for a class session in which to present.

Submitting written assignments:

All written assignments, including the course admission essay, should be e-mailed as attached Word documents to Dr. Christakis.

You should ensure that any written work you submit for evaluation is the result of your own research and writing, and that it reflects your own approach to the topic. You must also adhere to standard citation practices and properly cite any books, articles, websites, etc.

Remember: Academic integrity is a core institutional value at Yale. This includes, among other things, truth in presentation, diligence and precision in citing works and ideas, and acknowledging collaborations with others. In view of our commitment to maintaining the highest standards of academic integrity, the Graduate School Code of Conduct specifically prohibits the following forms of behavior: cheating on examinations, problem sets, and all other forms of assessment; falsification or fabrication of data; plagiarism (i.e., the failure in any written exercise to acknowledge ideas, research, or language taken from others); and multiple submission of the same work without obtaining explicit written permission from both instructors before the material is submitted. Students found guilty of violations of academic integrity are subject to one of several nasty penalties, according to the rules of Yale University.

Schedule:

Meeting 1, Sept. 21st: Nicholas Christakis

Meeting 2, Sept. 28th: Alex Isakov

Meeting 3, Oct. 5th: Mark McKnight

Meeting 4, Oct. 12th: Ruth Hunter
First seminar response paper is due.

No lab meeting Oct. 19-26

Meeting 5, Nov. 2nd: Hirokazu Shirado

Meeting 6, Nov. 9th: Yongren Shi

Meeting 7, Nov. 16th: Marcus Alexander
Second seminar response paper is due.

No lab meeting Nov. 23

Meeting 8, Nov. 30th: Laura Forastiere

Meeting 9, Dec. 7th: Student Presentations/TBD

Example lectures and topics from past years:

Shermin de Silva, “Social Networks in Asian Elephants”

Navid Hassanpour, “Experiments in Online Revolutions”

Holly Shakya, “Social Network Survey for Rural Villages in Honduras”

Derek Stafford, “Social Network Survey Software”

Hirokazu Shirado, “Online Experiments on Cooperation”

Akihiro Nishi, “Genetics of Social Networks”

Alex Isakov & Amelia Holcomb, “Analysis of Antagonistic Social Network Data”

Jessica Perkins, “Social Networks and Health in Rural Uganda”