

POLS 4158e – Analyzing Online Social Networks

Class Day/Time – Online Monday – Friday

Instructor – Jeffrey M. Glas, PhD

Contact Information

Instructor Email – jeffrey.glas@uga.edu

Office Hours – Thursdays from 9am – 10am and by appointment (via Zoom)

I. Course Description

Network analysis is an increasingly important methodological tool as the Internet, in general, and social media, in particular, become more central to political, economic, and social life. This course covers the theory and practice of network analysis with a focus on online networks, particularly social media.

Learning Objectives

- Students will learn to think in a more nuanced and scientific way about social behavior.
- Students will demonstrate proficiency in identifying, locating, and evaluating scholarly social science literature and use them to responsibly formulate new theories and hypotheses.
- Students will develop competency with the collection, management, and analysis of network data.
- Students will gain proficiency in the use of network analysis software.
- Students will develop and execute an original research design employing network theory and network analysis.

II. Course Requirements and Graded Evaluation

(2.1) Textbooks

This class does not use textbooks. Instead, we will be using open-source material freely available on the Web. After all, this is an online class about how to use the Internet for research purposes.

(2.2) Assessment

As a summer course, time will feel more scarce than usual. We are cramming an entire semester into eight (8) weeks. This class features five (5) assignments and one (1) exam. I normally do not like giving exams in upper-level classes but given the nature of the material I decided to make an exception. The exam covers network terminology, concepts and applications. With the exception of the ‘introducing yourself’ assignment, the remaining assignments involve applying course lessons and building up from simpler to more complex network analyses and graphs.

Assessment Item	Weight	Due Date
Introducing Yourself Assignment	10%	June 7 th
Network Terminology Exam	10%	June 21 st
Political Network Assignment	10%	June 28 th
Basics in Gephi	20%	July 12 th
Redesigning Social Media Research	20%	July 26 th
Original Network Analysis Assignment	30%	July 29 th

(2.3) Grading

All grades (including final grades) will be assigned following the system depicted below. You must earn a C or higher to pass this class. Grades will not be curved.

A	=	94-100	C+	=	78
A-	=	90	C	=	74
B+	=	88	C-	=	70
B	=	84	D	=	60 – 69
B-	=	80	F	≤	59

III. Class Policies

(3.1) UGA Student Honor Code

"I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others."

A culture of honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found at honesty.uga.edu.

(3.2) Class AI Policy

The use of artificial intelligence tools at any stage in your coursework is strictly prohibited.

(3.3) Disability Disclosure Statement

Able-bodiedness should not impede your intellectual development. Please get in touch with me (Dr. Glas) about any accommodations you need in the classroom, your breakout sessions, and for exams. We have some amazing resources for you here at UGA. For information about accommodations please contact the Accessibility & Testing (A&T) Office as soon as possible. For more information, please visit the A&T website (<https://accessibility.uga.edu/>). The A&T Office is located at 825 Lumpkin Street (Clark-Howell Hall) and can be contacted by phone (706.542.8719).

(3.4) Student Athletes

Representing our university in athletics places some unusual scheduling obligations on you. Please get in touch with me (Dr. Glas) about your schedule so we can make sure you are able to achieve in the classroom as well as on the field or in the arena.

(3.5) Missed/Late Assignments

Missed assignments are awarded a grade of zero. Late assignments will be accepted with a penalty of ten (10) points for each calendar day late. Extensions may be granted.

(3.6) Withdraw Policy

Be advised that the last day to withdraw from a course without automatically failing is Wednesday, July 15th. All students who withdraw after this date will receive a “WF”.

IV. UGA Well-being Resources

UGA Well-being Resources promote student success by cultivating a culture that supports a more active, healthy, and engaged student community. Anyone needing assistance is encouraged to contact Student Care & Outreach (SCO) in the Division of Student Affairs at 706-542-8479 or visit sco.uga.edu. Student Care & Outreach helps students navigate difficult circumstances by connecting them with the most appropriate resources or services. They also administer the Embark@UGA program which supports students experiencing, or who have experienced, homelessness, foster care, or housing insecurity.

UGA provides both clinical and non-clinical options to support student well-being and mental health, any time, any place. Whether on campus, or studying from home or abroad, UGA Well-being Resources are here to help.

Well-being Resources: <https://well-being.uga.edu>

Student Care and Outreach: <https://sco.uga.edu>

University Health Center: <https://healthcenter.uga.edu/>

Counseling and Psychiatric Services: <https://caps.uga.edu>

or CAPS 24/7 crisis support at 706-542-2273

Health Promotion/ Fontaine Center: <https://healthpromotion.uga.edu>

Accessibility & Testing Office: <https://accessibility.uga.edu/>

Additional information, including free digital well-being resources, can be accessed through the UGA app or by visiting <https://well-being.uga.edu>

V. Course Schedule¹

Important Administrative Dates for the Summer Thru-Session

Thursday, June 4th – First Day of Classes

Wednesday, June 19th – Last Day of Drop/Add

Friday, June 19th – Juneteenth Observation (No Classes)

Friday, July 3rd – Independence Day Observation (No Classes)

Wednesday, July 15th – Withdrawal Deadline

Wednesday, July 29th – Last Day of Classes

Unit 1 – Fundamentals of Research Methodology – A Crash Course

Week 1 – June 4th & 5th – Introduction and Syllabus

Syllabus

Fowler, J.H., Heaney, M.T., Nickerson, D.W., Padgett, J.F. and Sinclair, B., 2011. Causality in political networks. *American politics research*, 39(2), pp.437-480.

Introducing Yourself Assignment (Due June 7th)

Week 2 – June 8th – 12th – Political Networks

Grossmann, M. and Dominguez, C.B., 2009. Party coalitions and interest group networks. *American Politics Research*, 37(5), pp.767-800.

Kim, J.H., Barnett, G.A. and Park, H.W., 2010. A hyperlink and issue network analysis of the United States Senate: A rediscovery of the web as a relational and topical medium. *Journal of the American Society for Information Science and Technology*, 61(8), pp.1598-1611.

Lazer, D., 2011. Networks in political science: Back to the future. *PS: Political Science & Politics*, 44(1), pp.61-68.

Mahoney, C. and Baumgartner, F.R., 2015. Partners in advocacy: Lobbyists and government officials in Washington. *The Journal of Politics*, 77(1), pp.202-215.

¹ The course syllabus is a general plan for the course; deviations may be necessary.

Week 3 – June 15th – 18th – Network Theory

Milgram, S., 1967. The small world problem. *Psychology today*, 2(1), pp.60-67.

Granovetter, M.S., 1973. The strength of weak ties. *American journal of sociology*, 78(6), pp.1360-1380.

Burt, R.S., 2017. Structural holes versus network closure as social capital. *Social capital*, pp.31-56.

Network Terminology Exam (Due June 21st)

Week 4 – June 22nd – 26th – Network Theory & Graphing

Ward, M.D., Stovel, K. and Sacks, A., 2011. Network analysis and political science. *Annual Review of Political Science*, 14(1), pp.245-264.

Krebs, V.E., 2002. Mapping networks of terrorist cells. *Connections*, 24(3), pp.43-52.

Political Network Assignment Due (June 28th)

Week 5 – June 29th – July 2nd – Introduction to Gephi

see eLC Content

Week 6 – July 6th – 10th – Collecting Network Data

see eLC Content

Basics in Gephi Assignment (Due July 12th)

Week 7 – July 13th – 17th – Social Media and Network Analysis

Himmelboim, I., Sweetser, K.D., Tinkham, S.F., Cameron, K., Danelo, M. and West, K., 2016.

Valence-based homophily on Twitter: Network analysis of emotions and political talk in the 2012 presidential election. *New media & society*, 18(7), pp.1382-1400.

Min, S.J., 2021. Who Believes in Conspiracy Theories? Network Diversity, Political Discussion, and Conservative Conspiracy Theories on Social Media. *American Politics Research*, p.1532673X211013526.

Messing, Solomon, van Kessle, Patrick, and Hughes, Adam. 2017. Sharing the News in a Polarized Congress. *Pew Research Center*, December

Week 8 – July 20th – 24th – Experimenting on Social Media

Guess, A.M., 2021. Experiments Using Social Media Data. *Advances in Experimental Political Science*, 184.

Bond, R.M., Fariss, C.J., Jones, J.J., Kramer, A.D., Marlow, C., Settle, J.E. and Fowler, J.H., 2012. A 61-million-person experiment in social influence and political mobilization. *Nature*, 489(7415), pp.295-298.

Teresi, H. and Michelson, M.R., 2015. Wired to mobilize: The effect of social networking messages on voter turnout. *The Social Science Journal*, 52(2), pp.195-204.

Redesigning Social Media Research Assignment (Due July 26th)

Week 9 – July 27th – 29th – Final Projects

Extra Office Hours – July 27th

Original Network Analysis Assignment (Due July 29th)