

# **Network Criminology**

Arizona State University  
Criminology and Criminal Justice (CRJ) 691  
Fall Semester 2019

Time: Thursdays, 1:30-4:00 PM

Room: UCENT 214

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## **Overview**

*Network science* is a paradigm (i.e. a model of how the world works) that takes as its domain of interest the interdependence among units. This paradigm examines patterns or regularities in relationships (i.e. *structure*) among interacting units and focuses on a) how such patterns influence the behavior of these units and b) how such patterns are generated. *Network criminology* is a relatively new, loosely organized (but rapidly growing) body of research in the field of criminology that applies concepts and methods from network science to problems in criminology and criminal justice. This course provides an introduction to a broad range of concepts from what might be considered “classic” or “foundational” works in network science. The overarching goal of the course is to provide you the tools for thinking about problems in criminology and criminal justice through a network lens (i.e. viewing systems as made up of heterogeneous actors connected through different types of relations).

## **Course Materials**

### Required Texts:

Readings for each week are available through links embedded in this document.

### Other Resources:

There are also several journals that are specifically dedicated to social network research. You should consider subscribing to the content alerts of these journals to get a sense of what people are doing and what the “state of the art” is in network research:

*Social Networks* (<https://www.journals.elsevier.com/social-networks>)

*Network Science* (<https://www.cambridge.org/core/journals/network-science>)

*Connections* (<https://www.insna.org/connections>)

*Journal of Social Structure* (<https://www.cmu.edu/joss/>)

*SOCNET* listserv (<https://lists.ufl.edu/cgi-bin/wa?SUBED1=SOCNET&A=1>)

## **Course Requirements**

Your grade in this course will be based on weekly papers (20% of your grade), your performance leading three discussions (30% of your grade), and the preparation and presentation of an original research project based on the course content (50% of your grade).

**1. Weekly Response Papers and Discussion Questions** Each week you will prepare a 1-page (single-spaced, 12 point font) response paper reflecting on the readings for that week. The response paper should do two things: First, provide an answer to the question “how does the network concept improve our understanding of the criminology and/or criminal justice problem being addressed? Or not?”. Basically, ask yourself what the utility of adapting a “network lens” is for the problem. This is sometimes called the “value-added” from such an approach. Second, include at least 2 discussion questions to be brought up during our seminar time. Note that this is **not** a summary paper (i.e. Author W said X, Author Y said Z...), as this will be covered by the discussants. Rather, try to identify the relevance of the concept from network science for advancing criminological inquiry. Weekly papers must be printed and are due at the beginning of each class. *Each week I will randomly call on one of you to read your paper.* On days that you are scheduled to lead discussion, you are **not** required to write a response. There is no weekly paper due for the first week of class.

**2. Leading Discussion** For three classes you and other students will be responsible for leading discussion. In place of your weekly paper, you will be required to prepare a presentation of the readings and a list of questions for discussion. The presentation (in .ppt or .pdf format) and question list (in .docx format) should be sent to me no later than **noon** on the **day prior** to discussion (i.e. Wednesday). I will then post the discussion questions to Canvas.

*The presentation should accomplish three things:*

- A. Provide an overview of the network concept(s) covered. Basically, what is this concept all about? I am less concerned with your focus on the mathematical details (when applicable) and more about your understanding of the basic idea.
- B. Discuss the application of the network concept(s) in criminology & criminal justice. How has this idea been applied in criminology? Could it be improved? Has it been applied with fidelity (i.e. does the way it is discussed in the original source match the application in criminology & criminal justice?).
- C. Things not covered in A. and B. that you want to cover.

I expect you to break this into two parts: first discuss the network concept (after which we will take a break), then discuss the application.

Suggestion: for each article, have an answer to the “grandma” question. That is, if your grandmother (aka grams, grammy, mawmaw, abuela, etc.) asked you what the article was about, what would you say?

**3. Research Project** There are three options for the research project:

### *Option A. Extended Literature Review*

The paper should be an in-depth review of some topic in networks and criminology and/or criminal justice. The review should go beyond the readings discussed in class. Be sure to provide a synthesis of contributions on the topic. For example, discuss open questions, unresolved problems, points of agreement or disagreement among the papers, and future directions for research.

*Option B. Research Proposal*

The paper should review current literature to motivate a network research question (or questions) for further investigation. The paper should describe the current state of knowledge that motivates the research, pose one or more network research questions (or hypotheses) to be investigated, and describe relevant data (existing or new) and specific analyses that could be used to address the question(s).

*Option C. Analysis of Network Data*

This option is primarily for students who have already taken “Statistical Analysis of Network Data” and have experience analyzing social network data. The paper should analyze some set of social network data to address a clear network question (or questions) motivated by network literature. The analysis should include descriptive and inferential analyses. Note: this option should **not** be a re-submission of a prior class project or research paper. It should be a new project or a substantial extension of previous work.

To help you make progress on the project, I will require you to hand in two brief *research proposals* (proposals are ungraded). The first proposal (**due September 19<sup>th</sup>**) (a paragraph is fine) should describe generally what you are thinking of writing or the analysis you are considering (if Option C). The second proposal (**due October 17<sup>th</sup>**) is more detailed and should include a roughly developed introduction and sketch an outline of the overall paper (or, if Option C, an overview of the data and analyses). The second proposal should be 2-3 pages. On the same day you submit your second proposal, you will give a *mini presentation* discussing the content of your second proposal. The presentation is graded and is worth 50 points. Rubric for grading the presentation will be provided prior to the mini presentation to help you prepare. Due dates for each proposal and mini presentation are given in the course calendar (as well as the sentences you just read).

During the last class session (**December 5<sup>th</sup>**), students will present their project to the class in the format of a conference style presentation (more information about the presentation format will be provided later). The full presentation is graded and is worth 150 points. Rubric for grading the presentation will be provided prior to the full presentation to help you prepare.

The final paper should be about 10-15 pages, double-spaced, 1” margins, and 12-point Times New Roman font. The written paper is due by 5 pm on **December 9<sup>th</sup>**. The final paper is worth 300 points. Rubric for grading the final paper will be provided prior to due date to help you prepare.

In all, your grade breakdown will be as follows:

Weekly papers (25 points x 8)	200 points
Leading discussion (100 points x 3)	300 points
Research paper	<u>500 points</u>
Total	1000 points

Your grade will be assigned based on the following scale (passing grades are in **bold**):

<b>A+</b> 980-1000	<b>A</b> 920-979	<b>A-</b> 900-919
<b>B+</b> 850-899	<b>B</b> 800-849	B- 750-799
C+	700-749	D 0-599

## **Keys to Success**

Time Investment: The Arizona Board of Regents, the governing board for ASU, has a policy for how much time students should invest in their courses: "A minimum of 45 hours of work by each student is required for each unit of credit" (<http://azregents.asu.edu/rrc/Policy%20Manual/2-224-Academic%20Credit.pdf>). As a rule of thumb, for every hour of class you should expect to dedicate 3 hours outside of class to the course. This is the investment needed to succeed in this course.

Time Budgeting: For each week's workload, I strongly encourage you to create a time budget (just Google [or Ask Jeeves] "time budget examples"). Budgeting your time will help you to not only get through the reading, but have time to really think about the material.

Work with Others: Your fellow classmates are an excellent resource for developing your understanding of the material. I would encourage you to find a study partner or form a study group. Among other things, working with others helps create socially enforceable deadlines (i.e. accountability).

Care about your Work: I understand that you have competing time commitments, that there are multiple demands on your day, and that you may come to this particular course with varying levels of interest. Not everyone will make network criminology a part of their career, but a primary concern I have is that, independent of your long-term substantive interests, you take pride in all of the work that you do in this course.

## **Miscellaneous Course Information**

Late Assignments: I will not accept late assignments and they cannot be made up.

Extra Credit: There is no extra credit in this course.

Honesty and Cheating: Be honest and do not cheat. Thanks! Information regarding cheating and plagiarism can be found at: <http://provost.asu.edu/academicintegrity>. I strongly encourage you to read this not only for my course, but to protect your interests as a student.

Writing center: The ASU Graduate Writing Center provides appointment-based writing assistance for graduate students as well as space to read, write, and discuss their graduate research and writing projects. This assistance allows enrolled ASU students to meet with a graduate writing consultant to receive feedback on their writing or research projects at any stage in their development and writing process. The ASU Graduate Writing Center for the downtown campus is located in UCENT Room 101. Schedules may be found at <https://tutoring.asu.edu/student-services/graduate>. Appointments can be scheduled either online or by calling (480) 965-9072.

Students with special needs: If you require special accommodations for class, please see <https://eoss.asu.edu/drc> for ASU policies and procedures. The Disability Resource Center will provide you with a letter noting the classroom modifications that you will need to fully take part in class activities. With this letter, contact me during my office hours and I will gladly make the appropriate adjustments.

Course Evaluation: Teaching evaluations are very important and I strongly encourage you to take the time to complete it. Your participation is essential for improving the course. Evaluations are easy to access, just go to MyASU, click on My Classes, and then click Course Evaluations. Select CRJ 691 and you are ready to go. I will remind you when the evaluation survey for this course is available.

## **COURSE OUTLINE**

*Note: Each week lists several sections of readings.*

Required Readings-required for the course and will form the basis of our discussion. This section is divided into two subsections: *Network Concept(s)* and *Criminological Application*.

Suggested Additional Readings-not required, but will expand your knowledge-base on the topic. This section also has two subsections: *Criminological Application* and *Other Applications*.

### **8/22: Introductions & Course Overview**

Required Readings:

Butts, C. T. (2009). Revisiting the Foundations of Network Analysis. *Science*, 325(5939), 414-416.  
<http://doi.org/10.1126/science.1171022>.

Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network Analysis in the Social Sciences. *Science*, 323(5916), 892-895. <http://doi.org/10.1126/science.1165821>.

### **8/29: Thinking about Networks in Criminology**

Required Readings:

- Faust, K., & Tita, G. E. (2019). Social Networks and Crime: Pitfalls and Promises for Advancing the Field. *Annual Review of Criminology*, 2. <https://doi.org/10.1146/annurev-criminol-011518-024701>.
- Campana, P. (2016). Explaining criminal networks: Strategies and potential pitfalls. *Methodological Innovations*, 9. <http://doi.org/10.1177/2059799115622748>.
- Papachristos, A. V. (2014). The Network Structure of Crime. *Sociology Compass*, 8(4), 347-357.  
<https://doi.org/10.1111/soc4.12147>.
- Haynie, D. (2001). Delinquent Peers Revisited: Does Network Structure Matter? *American Journal of Sociology*, 106(4), 1013-1057. <http://doi.org/10.1086/320298>.
- Krohn, M. (1986). The Web of Conformity: A Network Approach to the Explanation of Delinquent Behavior. *Social Problems*, 33(6), S81-S93. <https://doi.org/10.2307/800675>.

Suggested Additional Readings:

- Rostami, A., & Mondani, H. (2015). The complexity of crime network data: a case study of its consequences for crime control and the study of networks. *PLoS One*, 10(3), e0119309.  
<http://doi.org/10.1371/journal.pone.0119309>.
- Smangs, M. (2010). Delinquency, Social Skills, and the Structure of Peer Relations: Assessing Criminological Theories by Social Network Theory. *Social Forces*, 89(2), 609-632. <https://doi.org/10.1353/sof.2010.0069>.
- Haynie, D. L., & Osgood, D. W. (2005). Reconsidering Peers and Delinquency: How do Peers Matter? *Social Forces*, 84(2), 1109-1130. <http://doi.org/10.1353/sof.2006.0018>.
- Krebs, V. E. (2002). Mapping Networks of Terrorist Cells. *Connections*, 24(3), 43-52.
- Klerks, Peter. (2001). "The Network Paradigm Applied to Criminal Organisations: Theoretical Nitpicking or a Relevant Doctrine for Investigators? Recent Developments in the Netherlands." *Connections* 24 (3):53-65.
- Sparrow, M. K. (1991). The application of network analysis to criminal intelligence: An assessment of the prospects. *Social Networks*, 13, 251-274. [https://doi.org/10.1016/0378-8733\(91\)90008-H](https://doi.org/10.1016/0378-8733(91)90008-H).

### **9/5: Theoretical Foundations, Formalism & Relationalism**

Required Readings:

- Erikson, E. (2013). Formalist and Relationalist Theory in Social Network Analysis. *Sociological Theory*, 31(3), 219-242. <http://doi.org/10.1177/0735275113501998>.

- Fuhse, J. A. (2009). The Meaning Structure of Social Networks. *Sociological Theory*, 27(1), 51-73.  
<http://doi.org/10.1111/j.1467-9558.2009.00338.x>.
- Emirbayer, M. (1997). Manifesto for a Relational Sociology. *American Journal of Sociology*, 103(2), 281-317.  
<http://doi.org/10.1086/231209>.
- Emirbayer, M., & Goodwin, J. (1994). Network Analysis, Culture, and the Problem of Agency. *American Journal of Sociology*, 99(6), 1411-1454. <https://www.jstor.org/stable/2782580>.

#### Suggested Additional Readings:

- Small, M. L., & Adler, L. (2019). The Role of Space in the Formation of Social Ties. *Annual Review of Sociology*, 45(1), 111-132. <http://doi.org/10.1146/annurev-soc-073018-022707>.
- Erikson, E., & Occhiuto, N. (2017). Social Networks and Macrosocial Change. *Annual Review of Sociology*, Vol 43, 43, 229-248. <http://doi.org/10.1146/annurev-soc-060116-053633>.
- Mills, B. J. (2017). Social Network Analysis in Archaeology. *Annual Review of Anthropology*, Vol 46, 46, 379-397. <http://doi.org/10.1146/annurev-anthro-102116-041423>.
- Harkin, D. (2015). Simmel, the Police Form and the Limits of Democratic Policing. *British Journal of Criminology*, 55(4), 730-746. <http://doi.org/10.1093/bjc/azv018>.
- Fuhse, J., & Mützel, S. (2011). Tackling connections, structure, and meaning in networks: quantitative and qualitative methods in sociological network research. *Quality & Quantity*, 45(5), 1067-1089.  
<http://doi.org/10.1007/s11135-011-9492-3>.
- Pachucki, M. A., & Breiger, R. L. (2010). Cultural Holes: Beyond Relationality in Social Networks and Culture. *Annual Review of Sociology*, 36(1), 205-224. <http://doi.org/10.1146/annurev.soc.012809.102615>.
- Rivera, M. T., Soderstrom, S. B., & Uzzi, B. (2010). Dynamics of Dyads in Social Networks: Assortative, Relational, and Proximity Mechanisms. *Annual Review of Sociology*, 36(1), 91-115.  
<http://doi.org/10.1146/annurev.soc.34.040507.134743>.
- Borgatti, S. (2003). The Network Paradigm in Organizational Research: A Review and Typology. *Journal of Management*, 29(6), 991-1013. [http://doi.org/10.1016/s0149-2063\(03\)00087-4](http://doi.org/10.1016/s0149-2063(03)00087-4).
- Podolny, J. M. (2001). Networks as the pipes and prisms of the market. *American Journal of Sociology*, 107(1), 33-60. <http://doi.org/10.1086/323038>.
- Powell, W. W. (1990). Neither Market nor Hierarchy - Network Forms of Organization. *Research in Organizational Behavior*, 12, 295-336.
- Mayhew, B. H. (1980). Structuralism Versus Individualism: Part 1, Shadowboxing in the Dark. *Social Forces*, 59(2), 335-375. <https://www.jstor.org/stable/2578025>.
- Radcliffe-Brown, A. R. (1940). On Social Structure. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 71(1), 1-12. <https://www.jstor.org/stable/2844197>.

## **9/12: Embeddedness**

#### Required Readings:

##### *Network Concept(s)*

- Uzzi, B., & Lancaster, R. (2004). Embeddedness and price formation in the corporate law market. *American Sociological Review*, 69, 319-344. <https://doi.org/10.1177/000312240406900301>.
- Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91(3), 481-510. <http://www.jstor.org/stable/2780199>.

##### *Criminological Application*

- Moeller, K., & Sandberg, S. (2019). Putting a price on drugs: An economic sociological study of price formation in illegal drug markets. *Criminology*, 57(2), 289-313. <https://doi.org/10.1111/1745-9125.12202>.
- Peng, Y. S. (2010). When Formal Laws and Informal Norms Collide: Lineage Networks versus Birth Control

- Policy in China. *American Journal of Sociology*, 116(3), 770-805. <http://doi.org/10.1086/657102>.
- Browning, C. R., Feinberg, S. L., & Dietz, R. D. (2004). The Paradox of Social Organization: Networks, Collective Efficacy, and Violent Crime in Urban Neighborhoods. *Social Forces*, 83(2), 503–534. <https://www.jstor.org/stable/3598338>.

#### Suggested Additional Readings:

##### *Criminological Application*

- Decker, S. H., Pyrooz, D. C., Sweeten, G., & Moule, R. K. (2014). Validating Self-Nomination in Gang Research: Assessing Differences in Gang Embeddedness Across Non-, Current, and Former Gang Members. *Journal of Quantitative Criminology*, 30(4), 577-598. <http://doi.org/10.1007/s10940-014-9215-8>.
- Vargas, R. (2014). Criminal Group Embeddedness and the Adverse Effects of Arresting a Gang's Leader: A Comparative Case Study. *Criminology*, 52(2), 143-168. <http://doi.org/10.1111/1745-9125.12033>.
- Baker, W. E., & Faulkner, R. R. (2004). Social networks and loss of capital. *Social Networks*, 26(2), 91-111. <http://doi.org/10.1016/j.socnet.2004.01.004>.
- McCarthy, B., & Hagan, J. (1995). Getting into Street Crime: The Structure and Process of Criminal Embeddedness. *Social Science Research*, 24(1), 63-95. <https://doi.org/10.1006/ssre.1995.1003>.
- Hagan, J. (1993). The Social Embeddedness of Crime and Unemployment. *Criminology*, 31(4), 465-491. <http://doi.org/10.1111/j.1745-9125.1993.tb01138.x>.

##### *Other Applications*

- Muennich, S. (2019). Profit as Social Rent: Embeddedness and Stratification in Markets. *Sociological Theory*, 37(2), 162-183. <https://doi.org/10.1177/0735275119850860>.
- Frank, K. A., Muller, C., & Mueller, A. S. (2013). The Embeddedness of Adolescent Friendship Nominations: The Formation of Social Capital in Emergent Network Structures. *American Journal of Sociology*, 119(1), 216-253. <https://doi.org/10.1086/672081>.
- Noordhoff, C. S., Kyriakopoulos, K., Moorman, C., Pauwels, P., & Dellaert, B. G. C. (2011). The Bright Side and Dark Side of Embedded Ties in Business-to-Business Innovation. *Journal of Marketing*, 75(5), 34–52. <https://doi.org/10.1509/jmkg.75.5.34>.
- Costa, D. L., & Kahn, M. E. (2007). Surviving Andersonville: The benefits of social networks in POW camps. *American Economic Review*, 97(4), 1467-1487. <https://doi.org/10.1257/aer.97.4.1467>.
- Granovetter, M. (2005). The Impact of Social Structure on Economic Outcomes. *Journal of Economic Perspectives*, 19(1), 33-50. <http://doi.org/10.1257/0895330053147958>.
- Uzzi, B. (1999). Embeddedness in the making of financial capital: How social relations and networks benefit firms seeking financing. *American Sociological Review*, 64, 481–505. [http://www.jstor.org/stable/2657252](https://www.jstor.org/stable/2657252).
- Uzzi, B. 1996. “The sources and consequences of embeddedness for the economic performance of organizations: The network effect.” *American Sociological Review*, 674-698. <http://doi.org/10.2307/2096399>.
- Portes, A. (1998). Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology*, 24(1), 1-24. <http://doi.org/10.1146/annurev.soc.24.1.1>.
- Portes, A., & Sensenbrenner, J. (1993). Embeddedness and Immigration: Notes on the Social Determinants of Economic Action. *American Journal of Sociology*, 98(6), 1320-1350. [http://www.jstor.org/stable/2781823](https://www.jstor.org/stable/2781823).

#### **9/19: Cohesion & Sub-Groups; FIRST PROPOSAL DUE**

##### Required Readings:

##### *Network Concept(s)*

- Shwed, U., & Bearman, P. S. (2010). The Temporal Structure of Scientific Consensus Formation. *American Sociological Review*, 75(6), 817-840. <http://doi.org/10.1177/0003122410388488>.
- Moody, J., & White, D. R. (2003). Structural cohesion and embeddedness: A hierarchical concept of social

groups. *American Sociological Review*, 68(1), 103-127. <http://doi.org/10.2307/3088904>.

#### *Criminological Application*

Ouellet, M., Bouchard, M., & Charette, Y. (2019). One gang dies, another gains? The network dynamics of criminal group persistence. *Criminology*, 57(1), 5-33. <http://doi.org/10.1111/1745-9125.12194>.

Calderoni, F., Brunetto, D., & Piccardi, C. (2017). Communities in criminal networks: A case study. *Social Networks*, 48, 116-125. <http://doi.org/10.1016/j.socnet.2016.08.003>.

Kreager, D. A., Rulison, K., & Moody, J. (2011). Delinquency and the Structure of Adolescent Peer Groups. *Criminology*, 49(1), 95-127. <http://doi.org/10.1111/j.1745-9125.2010.00219.x>.

#### Suggested Additional Readings:

##### *Criminological Application*

Lantz, B., & Hutchison, R. (2015). Co-Offender Ties and the Criminal Career: The Relationship between Co-Offender Group Structure and the Individual Offender. *Journal of Research in Crime and Delinquency*, 52(5), 658–690. <https://doi.org/10.1177/0022427815576754>.

Osgood, D. W., Feinberg, M. E., Wallace, L. N., & Moody, J. (2014). Friendship group position and substance use. *Addict Behav*, 39(5), 923-933. <http://doi.org/10.1016/j.addbeh.2013.12.009>.

Hughes, L. A. (2013). Group Cohesiveness, Gang Member Prestige, and Delinquency and Violence in Chicago, 1959-1962. *Criminology*, 51(4), 795-832. <http://doi.org/10.1111/1745-9125.12020>.

Klein, M. W., & Crawford, L. Y. (1967). Groups, Gangs, and Cohesiveness. *Journal of Research in Crime and Delinquency*, 4(1), 63–75. <https://doi.org/10.1177/002242786700400105>.

Short, J. F. & Strodebeck, F. L. (1965). *Group Processes and Delinquency*. Chicago: University of Chicago Press.

##### *Additional Application*

Rawlings, C. M., McFarland, D. A., Dahlander, L., & Wang, D. (2015). Streams of Thought: Knowledge Flows and Intellectual Cohesion in a Multidisciplinary Era. *Social Forces*, 93(4), 1687-1722. <http://doi.org/10.1093/sf/sov004>.

Friedkin, N. E. (2004). Social Cohesion. *Annual Review of Sociology*, 30(1), 409-425. <http://doi.org/10.1146/annurev.soc.30.012703.110625>.

Moody, J. (2004). The Structure of a Social Science Collaboration Network: Disciplinary Cohesion from 1963 to 1999. *American Sociological Review*, 69, 213-238. <https://doi.org/10.1177/000312240406900204>.

Girvan, M., & Newman, M. E. J. (2002). Community structure in social and biological networks. *Proceedings of the National Academy of Sciences*, 99(12), 7821-7826. <https://doi.org/10.1073/pnas.122653799>.

Moody, J. (2001). Peer influence groups: identifying dense clusters in large networks. *Social Networks*, 23(4), 261-283. [https://doi.org/10.1016/S0378-8733\(01\)00042-9](https://doi.org/10.1016/S0378-8733(01)00042-9).

## 9/26: No Class

### 10/3: Diffusion & Contagion

#### Required Readings:

##### *Network Concept(s)*

Mitchener, K. J., & Richardson, G. (2019). Network Contagion and Interbank Amplification during the Great Depression. *Journal of Political Economy*, 127(2), 465-507. <http://doi.org/10.1086/701034>.

Goldberg, A., & Stein, S. K. (2018). Beyond Social Contagion: Associative Diffusion and the Emergence of Cultural Variation. *American Sociological Review*, 83(5), 897-932. <http://doi.org/10.1177/0003122418797576>.

### *Criminological Application*

- de Vaan, M., & Stuart, T. (2019). Does Intra-household Contagion Cause an Increase in Prescription Opioid Use? *American Sociological Review*, 84(4), 577-608. <http://doi.org/10.1177/0003122419857797>.
- Papachristos, A. V., & Bastomski, S. (2018). Connected in Crime: The Enduring Effect of Neighborhood Networks on the Spatial Patterning of Violence. *American Journal of Sociology*, 124(2), 517-568. <https://doi.org/10.1086/699217>.
- Nash, R., Bouchard, M., & Malm, A. (2013). Investing in people: The role of social networks in the diffusion of a large-scale fraud. *Social Networks*, 35(4), 686-698. <http://doi.org/10.1016/j.socnet.2013.06.005>.

### Suggested Additional Readings:

#### *Criminological Application*

- Schaefer, D. R. (2018). A Network Analysis of Factors Leading Adolescents to Befriend Substance-Using Peers. *Journal of Quantitative Criminology*, 34(1), 275-312. <http://doi.org/10.1007/s10940-016-9335-4>.
- Weerman, F. M., Wilcox, P., & Sullivan, C. J. (2018). The Short-Term Dynamics of Peers and Delinquent Behavior: An Analysis of Bi-weekly Changes Within a High School Student Network. *J Quant Criminol*, 34(2), 431-463. <http://doi.org/10.1007/s10940-017-9340-2>.
- Mäs, M., & Opp, K.-D. (2016). When is ignorance bliss? Disclosing true information and cascades of norm violation in networks. *Social Networks*, 47, 116-129. <http://doi.org/10.1016/j.socnet.2016.05.004>.
- Turanovic, J. J., & Young, J. T. N. (2016). Violent Offending and Victimization in Adolescence: Social Network Mechanisms and Homophily. *Criminology*, 54(3), 487-519. <http://doi.org/10.1111/1745-9125.12112>.
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## **10/10: Weak Ties & Brokerage**

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*Network Concept(s)*

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## 10/17: Mini Presentations; SECOND PROPOSAL DUE

### 10/24: Network Dynamics & Vulnerability

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## **10/31: Co-Offending Networks & Gangs**

### Required Readings:

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#### *Criminological Application*

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### Suggested Additional Readings:

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## 11/7: Innovative Approaches to Network Data

### Required Readings:

#### *Network Concept(s)*

- Boutyline, A., & Vaisey, S. (2017). Belief Network Analysis: A Relational Approach to Understanding the Structure of Attitudes. *American Journal of Sociology*, 122(5), 1371-1447. <https://doi.org/10.1086/691274>.
- McCormick, T. H., Lee, H., Cesare, N., Shojaie, A., & Spiro, E. S. (2017). Using Twitter for Demographic and Social Science Research: Tools for Data Collection and Processing. *Sociol Methods Res*, 46(3), 390-421. <https://doi.org/10.1177/0049124115605339>.
- Hogan, B., Carrasco, J. A., & Wellman, B. (2016). Visualizing Personal Networks: Working with Participant-aided Sociograms. *Field Methods*, 19(2), 116-144. <https://doi.org/10.1177/1525822x06298589>.

#### *Criminological Application*

- Bellair, P. E., Light, R., & Sutton, J. (2019). Prisoners' Personal Networks in the Months Preceding Prison: A Descriptive Portrayal. *Int J Offender Ther Comp Criminol*, 63(3), 383-405. <https://doi.org/10.1177/0306624X18799575>.
- Greeson, M. R., Neal, J. W., & Campbell, R. (2019). Using Social Network Analysis to Identify Successful Relationship Patterns Within Sexual Assault Response Teams (SARTs). *Violence Against Women*, 25(8), 968-

998. <https://doi.org/10.1177/1077801218801115>.

Flores, R. D. (2017). Do Anti-Immigrant Laws Shape Public Sentiment? A Study of Arizona's SB 1070 Using Twitter Data. *American Journal of Sociology*, 123(2), 333-384. <https://doi.org/10.1086/692983>.

#### Suggested Additional Readings:

##### *Criminological Application*

Birks, D., & Davies, T. (2017). Street Network Structure and Crime Risk: An Agent-Based Investigation of the Encounter and Enclosure Hypotheses. *Criminology*, 55(4), 900-937. <https://doi.org/10.1111/1745-9125.12163>.

Boessen, A., Hipp, J. R., Butts, C. T., Nagle, N. N., & Smith, E. J. (2017). Social fabric and fear of crime: Considering spatial location and time of day. *Social Networks*, 51, 60-72.

<http://doi.org/10.1016/j.socnet.2016.12.001>.

Frith, M. J., Johnson, S. D., & Fry, H. M. (2017). Role of the Street Network in Burglars' Spatial Decision-Making. *Criminology*, 55(2), 344-376. <https://doi.org/10.1111/1745-9125.12133>.

Shjarback, J. A., & Young, J. T. N. (2017). The "Tough on Crime" Competition: a Network Approach to Understanding the Social Mechanisms Leading to Federal Crime Control Legislation in the United States from 1973–2014. *American Journal of Criminal Justice*, 43(2), 197-221. <http://doi.org/10.1007/s12103-017-9395-5>.

Volker, B., De Cuyper, R., Mollenhorst, G., Dirkzwager, A., van der Laan, P., & Nieuwbeerta, P. (2016). Changes in the social networks of prisoners: A comparison of their networks before and after imprisonment. *Social Networks*, 47, 47-58. <http://doi.org/10.1016/j.socnet.2016.04.004>.

Bichler, G., Malm, A., & Enriquez, J. (2014). Magnetic Facilities: Identifying the Convergence Settings of Juvenile Delinquents. *Crime & Delinquency*, 60(7), 971-998. <http://doi.org/10.1177/0011128710382349>.

Davies, T., & Johnson, S. D. (2014). Examining the Relationship Between Road Structure and Burglary Risk Via Quantitative Network Analysis. *Journal of Quantitative Criminology*, 31(3), 481-507.

<http://doi.org/10.1007/s10940-014-9235-4>.

Hipp, J. R., Faris, R. W., & Boessen, A. (2012). Measuring 'neighborhood': Constructing network neighborhoods. *Social Networks*, 34(1), 128-140. <http://doi.org/10.1016/j.socnet.2011.05.002>.

##### *Other Applications*

Hoffman, M. A. (2019). The Materiality of Ideology: Cultural Consumption and Political Thought after the American Revolution. *American Journal of Sociology*, 125(1), 1-62. <https://doi.org/10.1086/704370>.

Dunn, A. G., Surian, D., Leask, J., Dey, A., Mandl, K. D., & Coiera, E. (2017). Mapping information exposure on social media to explain differences in HPV vaccine coverage in the United States. *Vaccine*, 35(23), 3033-3040. <http://doi.org/10.1016/j.vaccine.2017.04.060>.

Yousefi-Nooraei, R., Marin, A., Hanneman, R., Pullenayegum, E., Lohfeld, L., & Dobbins, M. (2017). The Relationship Between the Position of Name Generator Questions and Responsiveness in Multiple Name Generator Surveys. *Sociological Methods & Research*, 48(2), 243-262.

<https://doi.org/10.1177/0049124117701484>.

Przulj, N., & Malod-Dognin, N. (2016). Network analytics in the age of big data: How can we holistically mine big data? *Science*, 353(6295), 123-124. <http://science.sciencemag.org/content/353/6295/123>.

Surian, D., Nguyen, D. Q., Kennedy, G., Johnson, M., Coiera, E., & Dunn, A. G. (2016). Characterizing Twitter Discussions About HPV Vaccines Using Topic Modeling and Community Detection. *J Med Internet Res*, 18(8), e232. <http://doi.org/10.2196/jmir.6045>.

Broniatowski, D. A., Paul, M. J., & Dredze, M. (2013). National and local influenza surveillance through Twitter: an analysis of the 2012-2013 influenza epidemic. *PLoS One*, 8(12), e83672.

<http://doi.org/10.1371/journal.pone.0083672>.

Bidart, C., & Charbonneau, J. (2011). How to Generate Personal Networks: Issues and Tools for a Sociological Perspective. *Field Methods*, 23(3), 266–286. <https://doi.org/10.1177/1525822X11408513>.

- Bearman, P., & Parigi, P. (2004). Cloning Headless Frogs and Other Important Matters: Conversation Topics and Network Structure. *Social Forces*, 83(2), 535-557. <https://doi.org/10.1353/sof.2005.0001>.
- Heckathorn, D. D. (1997). Respondent-Driven Sampling: A New Approach to the Study of Hidden Populations. *Social Problems*, 44(2), 174-199. <https://doi.org/10.2307/3096941>.

**11/14: No Class (American Society of Criminology Annual Conference)**

**11/21: Network Interventions & Policy Considerations**

Required Readings:

*Network Concept(s)*

Valente, T. W. (2012). Network interventions. *Science*, 337(6090), 49-53.

<https://doi.org/10.1126/science.1217330>.

Gest, S. D., Osgood, D. W., Feinberg, M. E., Bierman, K. L., & Moody, J. (2011). Strengthening prevention program theories and evaluations: contributions from social network analysis. *Prevention science : the official journal of the Society for Prevention Research*, 12(4), 349–360. <https://doi.org/10.1007/s11121-011-0229-2>.

*Criminological Application*

Bouchard, M., Hashimi, S., Tsai, K., Lampkin, H., & Jozaghi, E. (2018). Back to the core: A network approach to bolster harm reduction among persons who inject drugs. *Int J Drug Policy*, 51, 95-104. <https://doi.org/10.1016/j.drugpo.2017.10.006>.

Sierra-Arevalo, M., & Papachristos, A. V. (2017). Social Networks and Gang Violence Reduction. *Annual Review of Law and Social Science*, 13, 373-393. <https://doi.org/10.1146/annurev-lawsocsci-110615-085017>.

Papachristos, A. V., & Kirk, D. S. (2015). Changing the Street Dynamic. *Criminology & Public Policy*, 14(3), 525-558. <https://doi.org/10.1111/1745-9133.12139>.

Osgood, D. W., Feinberg, M. E., Gest, S. D., Moody, J., Ragan, D. T., Spoth, R., . . . Redmond, C. (2013). Effects of PROSPER on the influence potential of prosocial versus antisocial youth in adolescent friendship networks. *J Adolesc Health*, 53(2), 174-179. <https://doi.org/10.1016/j.jadohealth.2013.02.013>.

Westlake, B. G., Bouchard, M. and Frank, R. (2011), Finding the Key Players in Online Child Exploitation Networks. *Policy & Internet*, 3: 1-32. <https://doi.org/10.2202/1944-2866.1126>.

Schwartz, D. M., & Rouselle, T. (2009). Using social network analysis to target criminal networks. *Trends in Organized Crime*, 12(2), 188-207. <https://doi.org/10.1007/s12117-008-9046-9>.

Suggested Additional Readings:

*Criminological Application*

Bichler, G., Norris, A., Dmello, J. R., & Randle, J. (2019). The Impact of Civil Gang Injunctions on Networked Violence Between the Bloods and the Crips. *Crime & Delinquency*, 65(7), 875-915. <https://doi.org/10.1177/0011128717739607>.

Copeland, M., Siennick, S. E., Feinberg, M. E., Moody, J., & Ragan, D. T. (2019). Social Ties Cut Both Ways: Self-Harm and Adolescent Peer Networks. *J Youth Adolesc*, 48(8), 1506-1518. <https://doi.org/10.1007/s10964-019-01011-4>.

Gravel, J. and Tita, G. E. (2015), With Great Methods Come Great Responsibilities. *Criminology & Public Policy*, 14: 559-572. <https://doi.org/10.1111/1745-9133.12147>.

Dishion, T. J., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. *American Psychologist*, 54(9), 755-764. <https://doi.org/10.1037/0003-066X.54.9.755>.

*Other Applications*

Rulison, K. L., Feinberg, M., Gest, S. D., & Osgood, D. W. (2015). Diffusion of Intervention Effects: The

Impact of a Family-Based Substance Use Prevention Program on Friends of Participants. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*, 57(4), 433–440.  
<https://doi.org/10.1016/j.jadohealth.2015.06.007>.

**11/28: No Class (Thanksgiving)**

**12/5: Presentations**

**12/9: Final Paper Due**

## **BRIEF COURSE OUTLINE**

**8/22: Introductions and Course Overview**

**8/29: Thinking about Networks in Criminology**

**9/5: Theoretical Foundations, Formalism & Relationalism**

**9/12: Embeddedness**

**9/19: Cohesion & Sub-Groups; FIRST PROPOSAL DUE**

**9/26: *No Class***

**10/3: Diffusion & Contagion**

**10/10: Weak Ties & Brokerage**

**10/17: Mini Presentations; SECOND PROPOSAL DUE**

**10/24: Network Dynamics & Vulnerability**

**10/31: Co-Offending Networks & Gangs**

**11/7: Innovative Approaches to Network Data**

**11/14: *No Class (American Society of Criminology Annual Conference)***

**11/21: Network Interventions & Policy Considerations**

**11/28: *No Class (Thanksgiving)***

**12/5: Presentations**

**12/9: Final Paper Due**