POLITICAL NETWORKS
Government 400 002 (CRN: 20089)
George Mason University
Tuesdays and Thursdays 10:30am – 11:45am
Music Theater Building 1004
Spring 2019

Professor: Jennifer Nicoll Victor, Ph.D.
Email: jvictor3@gmu.edu
Twitter: @jennifernvictor
Office: Research Hall 343
Office Hours: Tuesdays & Thursdays 1:30am – 3:00pm, or by appointment
Course Website: Available for enrolled students at http://blackboard.gmu.edu

Teaching Assistant: Erica Seng-White, esengwhi@masonlive.gmu.edu
Office Hours: Thursdays, 12:00 – 4:00, in graduate student carrels accessed via Research Hall 359

Schar School Main Office: Research Hall 359

I. Course Description
The study of networks, connections, or relationships in politics is intuitive. In this course we learn the theory, methods, and applications of a systematic study of networks in politics. For many decades the study of politics has been dominated by studying individuals and institutions. In this course, we challenge the basic assumptions of those individualistic approaches and look at specific cases where it may be unreasonable to assume that people or events are independent of one another. The course is interdisciplinary, drawing strongly from sociology, statistics, and computer science. Networks are a ubiquitous feature of the natural and social world and we will draw upon examples and lessons from many fields, from genetics to anthropology, to understand how networks operate in politics. The course covers theories of social network analysis and applies them to questions of politics. To do so, we will also apply methodological tools and software to social network data. The course is introductory and provides somewhat of a survey of the field. Students are not required to have a quantitative background, but those who have previous experience with statistics or data analysis may have an advantage in becoming familiar with the techniques.

II. Course Objectives
I have three broad objectives for this course. First, students will learn the fundamental theoretical and methodological concepts in social network analysis as it relates to politics. Second, students will learn basic network analytical skills and develop the ability to use basic tools in at least one software program. This will include best practices for gathering and managing network data. Third, I aim to stimulate students’ curiosity about politics and creative means of studying questions pertinent to modern problems and interests.
III. Teaching Philosophy and Teaching Style

My teaching philosophy is based on three primary principles.

- First, I believe the gap between undergraduate and graduate coursework in political science is too broad. I therefore introduce advanced theoretical concepts in undergraduate classes so that students understand the true value of studying politics as a science; moreover, should any student choose to pursue advanced or graduate work in political science, they will be well prepared.

- Second, I believe in incorporating current events into classroom lessons. Nothing in science seems concrete until one can “see it with their own eyes.” Reading a daily newspaper and following current events, then applying theoretical concepts to political happenings helps to clarify theoretical concepts and demonstrate their utility.

- Third, as this class has a significant practical component, I intend to provide ample opportunities for students to practice techniques in and out of class using exercises and other pedagogical devices. It will be important for students to remain active with the activities and to engage in practice with the software and techniques. Learning is an active, not passive, process.

- Finally, as an instructor and a leader of class discussions on everything from lawmaking to elections, I aim to remain politically neutral and non-partisan. Students should learn to collect and evaluate information on their own. I would not want students who disagree with my political views to hear all course information with a skeptical ear; nor would I want students who tend to agree with my views to accept everything I say at face value. I encourage students to express their views, be critical, and challenge information when it is appropriate.

My teaching style is consistent with my philosophy. I use a Socratic-style in the classroom in which I frequently ask questions and encourage an interactive learning experience. I do my best to learn students’ names, encourage participation, and create, what I hope is, an open learning environment where students feel free to question, comment, and explain how they view course content. Such an environment helps to foster student interaction, thinking, and analytical and creative skills. Moreover, while lectures are important because they help to distribute necessary information and facts, they are not usually the most effective way to learn information. For this reason, we will do a variety of activities in the classroom. Successful performance in this course will include classroom participation and working in and out of class with your peers.

IV. Student Responsibilities

A. Class Attendance and Participation. Learning is an active, rather than passive, exercise. Accordingly, every student is expected to attend class as well as be prepared to ask questions about and comment on the readings. You need to complete the daily reading assignment prior
to the class meeting. You will be much more successful in this class if you attend regularly, take
notes, pay attention, and participate.

B. Readings. As is the case with attendance, keeping pace with the reading is essential to
succeeding in this class. It is your responsibility to obtain copies of the readings prior to the
date we will discuss them in class. I will do everything I can to make this task easier for you.
You will be much more successful in this course if you complete the assigned readings and take
notes on them.

C. Technology Laptops, tablets, and smart phone are a considerable distraction in class. A
student can become easily distracted by non-class alternatives that compete for your attention.
In addition, research shows that students tend to retain more information by taking notes by
hand rather than on a computer. However, this course is technology heavy as we will be
learning statistical software that is probably unfamiliar to you. It requires considerable practice
and training. Therefore, I leave it to students to make their own choice about how to maximize
their in-class learning. If you choose to use a laptop, make a commitment to only using content
related to class.

D. Cheating, Plagiarism, and Academic Integrity. Students in this course will be expected
to comply with the George Mason University Honor Code (see http://honorcode.gmu.edu/).
There are three simple guidelines to follow with respect to academic integrity: (1) all work you
submit must be your own; (2) when using the work or ideas of others, including fellow students,
give full credit through accurate citations; and (3) if you are uncertain about the expectations
for any assignment, ask for clarification. Any student engaged in any academic misconduct will receive an F on the offending exam or assignment. Egregious violations will result in an F grade
for the course and will be reported to the appropriate Dean’s office. These violations include
cheating on an exam, using someone else’s work as your own, and plagiarizing the written
word. Plagiarism (using someone else’s words or ideas without providing credit or citation) is a
serious offense. If you have any questions at all about what constitutes cheating, plagiarism, or
academic misconduct, please ask the instructor.

E. Students with Disabilities. If you have a disability for which you are or may be
requesting an accommodation, please let me (the instructor) know and contact the Office of
Disability Services (ODS) at (703) 993-2474 or http://ods.gmu.edu. All discussions with me
regarding disabilities are confidential.

F. Email. Mason uses only Mason e-mail accounts to communicate with enrolled students.
Students must activate their Mason e-mail account, use it to communicate with their
department and other administrative units, and check it regularly for important university
information including messages related to this class. Email etiquette: An email is a professional
correspondence; do not write it as if it is a text message, snap, tweet, or IM. Always use a
salutation and sign your name. Consider creating a signature that automatically inserts your
name and basic contact information at the bottom of your emails. Use proper punctuation and
grammar.
G. **Dropping or withdrawing.** The last day to add this course is **Tuesday, January 29, 2019.** The last day to drop the class with no tuition penalty is **February 5, 2019.** Students may elect to withdrawal from the class (with 100% tuition liability) between February 6 – February 12. From February 26 – March 25 students may elect to use a Mason “selective withdrawal” to drop the course (you can only do this three times during your time as a Mason student). After March 25 there are no options for withdrawing from the course. More information on drop and withdrawal policies is [here](#). If you have concerns about your performance in the course, or you find yourself unable to perform for any reason, you should discuss your concerns with your teaching assistant, professor, advisor, and Assistant Dean (in that order). Students seeking to drop or withdrawal are responsible for doing so on their own in Patriot Web. If you need help or advice, please see your academic advisor. The advisors in the Schar School main office (3rd floor Research Hall) can also help.

V. **Course Requirements and Graded Evaluation**

There are four graded requirements for this course, described below. Grades will be calculated on a non-curved typical A-F scale where,

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93-100</td>
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<tr>
<td>B+</td>
<td>87-89</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>73-76</td>
</tr>
<tr>
<td>B-</td>
<td>70-72</td>
</tr>
<tr>
<td>C-</td>
<td>67-69</td>
</tr>
<tr>
<td>D+</td>
<td>63-66</td>
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<tr>
<td>D</td>
<td>60-62</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60</td>
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**Warm-up activities (5%)** We will start each class meeting with a warm up activity that helps to reinforce concepts taught previously in class. These activities will be open-book, open-note, and completely collaboratively with classmates. This counts as participation and attendance points. Your lowest three warm-up scores will be excluded from your course grade.

**Problem Set Assignments (20%)** There will be regular exercises for students to complete. Most of these will be able to be completed on-line or completed through a software program (UCInet) and submitted on-line. Details on these assignments will be presented in class and on Blackboard.

**Midterm Exam (25%)** This will be an in-class exam covering material from the first half of the course. The exam will include multiple choice, short answer, and analytical (homework style) questions based on material presented in class and in the readings. A study guide will be posted on-line no later than one-week before the exam. The midterm will be in-class on **Thursday, March 7.**

**Research Poster (25%)** Each student will complete a research project that culminates in the production of an academic poster. Students will present posters in a public session (more details later). Posters will contain the content of a complete academic paper (statement of a research question, theory, hypotheses, test, analysis). In these projects students will use one of
several suggested datasets and demonstrate ability to apply analytical concepts to original questions relating to the dataset of choice. Students must use proper citation in their posters.

**Final Exam (25%).** This will be an in-class exam covering material from the entire course (comprehensive), though concentrating on material from the last half of the course. The exam will include identifications, short answers, and analytical questions based on class exercises, material presented in class, and in the readings. A study guide will be posted on-line no later than one-week before the exam. The exam will be administered during the regular final exam scheduled time for our class on **Wednesday, May 10, 2017 at 1:30pm – 4:15pm.** This is the ONLY time to take the exam.

**VI. Policies on late work, make-ups and extra credit**

A. **Can I submit an assignment late?** Students may submit an assignment after its due date for a 5% (off the total possible score) penalty per-24-hour period that the assignment is late.

B. **What if I miss an exam?** Make-up exams are only given in the case of verified illness or family emergency, such as a death in the family. Documentation is necessary to receive a qualified make-up examination. Students who arrive late to an in-class exam may still sit for the exam if no other student has already submitted their exam; once a single student hands-in their exam, no others may begin the exam.

C. **What can I do if I perform poorly on an assignment?** Students who receive a 72% or less on a homework assignment or essay (not exam) may re-do the assignment for a replacement grade. Re-do assignments are subject to a 5% per day penalty starting from the day graded assignments were returned to students in class (regardless of attendance). Assignments that were originally submitted past the due date are NOT eligible for re-do.

**VII. Texts**

The reading assignments are chosen to buttress and expand on the analytic foundation laid in class. **Please notify the instructor about problems obtaining the readings as soon as possible.** The following materials are required and can be found at the campus bookstore.

Barabási, Albert-László. 2010. *Bursts: The Hidden Patterns Behind Everything We Do, from you E-mail to Bloody Crusades.* New York: Plume.


**VIII. Software**

The primary software we will learn in this course for doing network analysis is called **R**. You may have already learned some **R** in another class (GOV 300?). **R** is a command-line statistical programming language that is free and open source. It can be operated in Mac OS, Windows, or Linux. There are a number of free packages available in R for network analysis and visualization. **R** offers an ideal environment for network analysis, but the learning curve to learn the language is steep. You can download **R** here: https://cran.r-project.org/

Follow this tutorial for getting started: https://swirlstats.com/students.html

Alternatively, for students who are highly averse to learning how to code in a statistical language, there is an alternative software you can use called **UCInet**. **UCInet** is a graphical user interface (GUI) (i.e., point and click) for social network analysis. **UCInet** has network visualization software built-in, called NetDraw. It is described in two of the books below (Hanneman and Riddle, and Borgatti, et al.). A 90-day free trial is available; a student license is $40. **UCInet** can only be operated on Microsoft Windows operating software. We will not spend time in class learning **UCInet** because we will focus our time on learning **R**. The software is available here: https://sites.google.com/site/ucinetsoftware/home

**IX. Course Schedule and Reading Assignments**

**Tues., Jan. 22**  
INTRODUCTION TO THE COURSE AND THE STUDY OF NETWORKS IN POLITICS

**Part I: Foundations and Tools**

**Thurs., Jan. 24**  
DEVELOPING INTUITIONS  
Barabási, Chs. 1-5

<table>
<thead>
<tr>
<th>Date</th>
<th>Reading Topics</th>
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| Tues., Jan. 29 - Thurs., Jan. 31 | **Fundamental Components of a Network**  
Borgatti, et al., Ch. 1  
Luke, Ch. 1  
Hanneman and Riddle, Preface, Chs. 1-2  
| Tues., Feb. 5 - Thurs., Feb. 7 | **Mathematical Foundations of Graph Theory/Software Introduction**  
Borgatti, et al., Ch. 2  
Hanneman and Riddle, Chs. 5-6  
Luke, Ch. 2  
| Tues., Feb. 12 - Thurs., Feb. 14 | **Social Network Research Design and Data Collection**  
Borgatti, et al., Chs. 3 - 5  
Luke, Ch. 3 |
| Tues., Feb. 19 - Thurs., Feb. 21 | **Visualization of Network Data**  
Borgatti, et al., Ch. 7  
Hanneman and Riddle, Chs. 3 – 4  
Luke, Chs. 4 - 5  
| Tues., Feb. 26 - Thurs., Feb. 28 | **The Ubiquity of Networks**  
Barabási, Chs. 6 - 10  
“Connected: The Power of Six Degrees,” a documentary film by Annamaria Talas (2009). We will watch this movie in class on Tuesday, this week. |
| Tues., Mar. 5 - Thurs., Mar. 7 | Exam Review (Tues)  
Midterm Exam (Mar. 7) |

*Spring Break  
March 11-17, 2019*
### Part II: Network Properties & Applications

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>References</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Tues., Mar. 26 - Thurs., Mar. 28</td>
<td><strong>The Whole Enchilada</strong></td>
<td>Borgatti, et al., Chs. 9 - 10</td>
<td>JNV birthday</td>
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<tr>
<td>Tues., Apr. 9 - Thurs., Apr. 11</td>
<td><strong>Connectivity</strong></td>
<td>Hanneman &amp; Riddle, Ch. 7</td>
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<td>Barabási, Chs. 16 – 20</td>
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<td>Tues., Apr. 16 - Thurs., Apr. 18</td>
<td><strong>Subgroups</strong></td>
<td>Borgatti, et al., Ch. 11</td>
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Luke, Ch. 8
Hanneman & Riddle, Ch. 11

**Tues., Apr. 23 - Thurs., Apr. 25**
**NETWORKS AND COLLECTIVE ACTION**
Hassanpour, Chs. 1 - 3


**Tues., Apr. 30 - Thurs., May 2**
**ADVANCED TOPICS**
Hassanpour, Chs. 4 - 6

Barabási, Chs. 21 - 28
Borgatti, et al., Ch. 12 (Equivalent Networks)
Hanneman & Riddle, 12. Equivalence
Hanneman & Riddle, 13. Similarity and Structural Equivalence

**Tues., May 14**
**FINAL EXAM 10:30AM – 1:15PM**