E-Governance and Digital Services Spring 2022 20:834:517:01 Monday 5.30-8.10 p.m. School of Public Affairs and Administration Rutgers University-Newark

Instructor: Fangda Ding Email: fd235@newark.rutgers.edu Office hours by appointment only Office location: CPS 3rd floor

Course Description

This course is designed to introduce students to the theory and practice of the application of Information and Communication Technologies (ICTs) in public administration. In this course, students will identify the fundamental constructs of governance in the digital age, review classical theories that justify E-governance, and discuss the major topics of public services digitalization that both scholars and public administrators are concentrating on. Through the analysis of the theoretical discussions and empirical cases in an interactive manner, students can develop an understanding of the broad swath of issues in E-governance, which helps manage the digital transformations in public and nonprofit sectors.

This course covers the essential elements of E-Governance and digital public services, such as the involved social construction, ethics, and accountability, and the use of ICT technologies including algorithms, artificial intelligence, social media, and GIS in government transparency, crowdfunding public services, urban governance, and public/civic data governance. Students will be expected to demonstrate their research identities and apply their acquired knowledge from this course to critically analyze extant research pieces on issues of public administration in a digital era.

Course Objectives

After this course, students should be able to:

- 1. Identify and understand the core concepts of E-governance.
- 2. Compare and contrast the major theories explaining the major topics of E-governance.
- 3. Explain the pros and cons of ICT applications in government
- 4. Appreciate different functions of ICTs in public governance.
- 5. Learn how the scholarly discussions on the use of ICTs in governance have evolved over time.

Course Materials

There is no textbook for this class. All reading materials will be made available on Canvas. Details can be found in the last section Reading List.

Course Evaluation

Class attendance (10%)

Each student is required to come prepared to class. Since class discussion is an integral part of the course, absences and lack of preparedness are unacceptable. If you are sick, have a personal emergency, or a professional commitment and cannot attend, please notify me ahead of time for an excused absence. Unexcused absences and lack of preparation will count heavily against your grade. Please check the section of Accommodation and Support Statement for the detailed instruction if you need help.

Class participation (10%)

Preparation will always involve reading and reflexing with all the weekly assigned materials. You are responsible for completing all required readings before class. In order to show your own reflection on the weekly readings, starting from Class 2, each student will need to prepare one discussion question that interests you the most for in-class discussion. Your questions should be appropriate for further discussion. Please avoid those questions that can be easily answered based on common sense or through a Google search. Upload your question on the Discussion Board by Sunday midnight before the class.

Discussion leadership (15 + 15 = 30%)

In addition to being prepared to engage in discussion every class, each student will be asked to collaboratively lead class discussion for one class session. I will lead the discussions in the first two sessions while everyone else is getting settled. The session assignments will be made during the first class.

Generally, the discussion leaders' task is to: (1) thoroughly prepare the topic to be discussed that day, and be particularly knowledgeable about it, including both the required readings and complementary readings outside the syllabus (if applicable), (2) prepare a presentation (45-60 minutes max) of a synthesis and critique that ties the assigned papers together (through key themes, questions, debates, etc.) and shows links to other theoretical perspectives that we have discussed in this class or that you have studied in other classes, and (3) prepare and deliver questions for class discussion that will lead students to integrate and compare the papers and seek out new research opportunities

By Sunday before the class that you are scheduled to lead, please send me via email your draft slides. I will meet with you in person (or via zoom or phone call) in the following Monday morning to provide feedback and approve your plan.

You presentation and slides will be graded separately.

Term paper (20\% + 30\% = 50\%)

To reflect their understanding of public administration after learning from this course, students are asked individually to write a full-length paper by the end of this semester. The paper can be but not restrict to:

* Review article: critical review of a group of articles on one weekly topic discussed in this course. Select several works on <u>a specific topic discussed in each week</u> and then summarize and critically evaluate them. The selected articles should be <u>peer-reviewed</u> journal articles and <u>outside</u> the required or optional readings.

* **Case study.** Students can alternatively write an analytical essay by selecting a case or phenomenon that interests them from ICT use in the public service. The case should present a problem or challenge in some way, which can be driven by the facts of the case itself or by theoretical literature from the class.

The project of final paper proceeds in two stages:

Prospectus (5% + 15% = 20%)

Before drafting their final paper, students are asked to provide an outline of their term papers individually before writing their final drafts. The outline is about **one page, single-spaced** and should:

* Describes the focus of the paper and its links to the literature of this course;

* Provides a brief overview of the paper's anticipated sections; the concluding section in all papers should be "Implications for a theory/practice of public administration/the specific topic in public administration as discussed in this course"

* Indicates the sources of information that you will use.

* Provides a list of references that you will use in your full paper.

In order to get timely feedback and start writing their full paper, students are suggested to submit their outlines by the end of March. Discussion of the topic by appointment is welcomed.

<u>Every student will be asked to do a 10-min presentation for their final project based on</u> their prospectus in the last two weeks (Week 14 & 15).

Final paper (30%)

The final paper is in **Times Roman 12-font**, **double-spaced**, **and approximately 5000 words in length excluding references**. The following criteria will be taken into consideration for grading:

1. Is it clearly and fluently written?

This includes not just the use of language but the flow of the argumentation and the logic of the organization and structure.

2. Does the introduction set the scene and make the research question/thesis statement clear?

This includes summarizing the topic/case and its background, stating the research question/thesis statement, and describing from a theoretical, ethical, or practical perspective why the question posed in the paper is important to address.

3. Clear demonstration of the literature and case.

For review article, this include a clear understanding of the ideas in the selected literature, which can answer the following questions: what is the topic of these articles? what is the related literature talking about? what are the basic arguments of the articles? What are the core assumptions behind the arguments? how are these arguments supported? what is implied in these articles?

For case study, this includes the factual information and description of the case, what matters about it, and the selection and elucidation of the analytical framework. It should be clear why we should care about this case, what scholarly literature is relevant to exploring or unlocking the problems around the case, and what analytical tools (theories, indicators, models, laws, etc) will be used to address it.

4. Is the analysis accurate and effective?

For review article, this includes critical analysis of the selected articles by addressing a series of questions for instance: what are the strengths and weaknesses of the proposed arguments? under what circumstances are the arguments meant to apply? how much do those papers advance our knowledge about the phenomenon studied? do you find the stories in the papers "believable"? why or why not? what alternative explanations might drive the findings? how could the papers be improved? what further research questions do those papers suggest to you?

For case study, this includes the application of the analytical framework, the level of thought and analysis used, and the handling of arguments or evidence used to answer the research question.

5. Is the conclusion clear and persuasive?

This includes the conciseness of the conclusions, their logical connection with the prior analysis, and the implications for further agenda of research and practice.

The final paper is due on May. 12th, 2022.

Policies

Grading policy:

The course grade is determined by the following components:

Attendance	10%
Participation	10%

Discussion leadership	15% + 15% = 30%
Term paper	20% + 30% = 50%

Final scores will be rounded to the nearest integer. Final grades will be assigned according to the following scale:

Letter Grade	Definition	Points
А	Outstanding	90 - 100
B+	Excellent	85 - 89
В	Good	80 - 84
C+	Average	75 - 79
С	Satisfactory	70 - 74
D	Poor	60 - 69
F	Fail	0 - 59

Plagiarism and Academic Honesty:

When writing about, paraphrasing, or quoting the work of others, you must give proper attribution in the form of parenthetic citations and quotation marks around directly quoted phrases or sentences. Using work in this class that you have completed for another class is plagiarism. Ignorance is not an acceptable excuse for plagiarism. Plagiarism will not be tolerated.

Written Work:

Proper grammar, punctuation, and spelling are expected—as is a writing style befitting someone earning a doctoral degree. All writing assignments should be: typed, proofread, doublespaced, 12-point font, one-inch margins, and should follow an accepted, consistent, and complete citation scheme (e.g., APA or MLA format). Please turn in all assignments on time. The following websites provide basic guidelines regarding the APA citation style:

https://owl.purdue.edu/owl/research and citation/apa style/apa style introduction.html

For any further help with reading, writing or even research skills, students may reach out to the Rutgers, Newark Writing Center, which provides writing tutoring and writing workshops to all undergraduate students currently enrolled in classes on the Rutgers University, Newark Campus. The Newark Writing Center is located in Conklin 126. Contact information may be found on their website:

http://www.ncas.rutgers.edu/writingcenter

Accommodation and Support Statement

Rutgers University Newark (RU-N) is committed to the creation of an inclusive and safe learning environment for all students and the University as a whole. RU-N has identified the following resources to further the mission of access and support:

For Individuals Experiencing Disability: The Office of Disability Services (ODS) works with students with medical, physical, and/or mental conditions who encounter disabling barriers in order to determine reasonable and appropriate accommodations for access. Students who have completed the process with ODS and have approved accommodations are provided a Letter of Accommodation (LOA) specific to each course. To initiate accommodations for their course students must both provide the LOA to and have a conversation with the course instructor about the accommodations. This should occur as early in the semester as possible. More information can be found at the RU-N ODS website (ods.newark.rutgers.edu). Contact ODS at (973) 353-5375 or via email at ods@newark.rutgers.edu.

For Individuals who are Pregnant: The Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy. Students may contact the Office of Title IX and ADA Compliance at (973) 353-1906 or via email at <u>TitleIX@newark.rutgers.edu</u>.

For Absence Verification: The Office of the Dean of Students can provide assistance for absences related to religious observance, emergency or unavoidable conflict (illness, personal or family emergency, etc.). Students should refer to <u>University Policy 10.2.7</u> for information about expectations and responsibilities. The Office of the Dean of Students can be contacted by calling (973) 353-5063 or emailing <u>deanofstudents@newark.rutgers.edu</u>.

For Individuals with temporary conditions/injuries: The Office of the Dean of Students can assist students who are experiencing a temporary condition or injury (broken or sprained limbs, concussions, or recovery from surgery). Students experiencing a temporary condition or injury should submit a request using the following link: <u>https://temporaryconditions.rutgers.edu</u>.

For Gender or Sex-Based Discrimination or Harassment: The Office of Title IX and ADA Compliance can assist students who are experiencing any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking. Students can report an incident to the Office of Title IX and ADA Compliance by calling (973) 353-1906 or emailing <u>TitleIX@newark.rutgers.edu</u>. Incidents may also be reported by using the following link: <u>tinyurl.com/RUNReportingForm</u>. For more information, students should refer to the University's Title IX Policy and Grievance Procedures located at <u>https://uec.rutgers.edu/wp-content/uploads/60-1-33-current-1.pdf</u>

For support related to Interpersonal Violence: The Office for Violence Prevention and Victim Assistance (VPVA) can provide any student with confidential support. The office does **not** have a reporting obligation to Title IX. Students can contact the office by calling (973) 353-1918 or emailing <u>run.vpva@rutgers.edu</u>. There is also a confidential text-based helpline available to students; students can text (973) 339-0734 for support. Students do not need to be a victim/survivor of violence; any student can receive services, information and support.

For Crisis and Concerns: The Campus Awareness Response and Education (CARE) Team works with students in crisis to develop a plan of support plan and address personal situations that might impact their academic performance. Connect with the CARE Team by using the following link: <u>tinyurl.com/RUNCARE</u> or emailing <u>careteam@rutgers.edu</u>.

For Stress, Worry, or Concerns about Well-being: The Counseling Center has confidential therapists available to support students. Students should reach out to the Counseling Center to schedule an appointment: <u>counseling@newark.rutgers.edu</u> or (973) 353-5805. If students are not quite ready to make an appointment with a therapist but are interested in self-help, check out *Sanvello* for an easy, web-based approach to self-care and support. Visit <u>https://my.rutgers.edu/</u>, click on Sanvello: Wellness @ RUN, and log in with your netid to begin your journey toward wellness.

For emergencies, call 911 or contact Rutgers University Police Department (RUPD) by calling (973) 353-5111.

Course Schedule

#Week	Date	Торіс	Presenter
1	Jan. 24	E-governance: what is it?	Fangda Ding

2	Jan. 31	Conducting research on E-governance	Fangda Ding
3	Feb. 1	Constructivist Perspective and	Anna Agboste + Naija Omari
		Collaboration in E-Governance	
4	Feb. 14	Assumptions in Studying Technology &	Jon George + Keisha Ferguson
		E-Government Ethics	
5	Feb. 21	Privacy Governance	Marie-Paule Florestal
6	Feb. 28	Administrative Discretion &	Glennae Brown + Victoria Bruno
		Administrative Burden	
7	Mar. 7	Crowdfunding public projects	Epiphany Munz + Kenyela Horn
8	Mar. 14	Spring Recess-no class	
9	Mar. 21	ASPA & APPAM conferences-no class	Ideal time to submit prospectus
10	Mar. 28	Social Media and Governance	Iveth Gonzales
11	Apr. 4	Smart Cities	Ruiqi Zhang + Jaime Velazquez
12	Apr. 11	Civic Open Data	Bill Mulligan
13	Apr. 18	Database Governance	Samuel Olagunju + Lindsey
			Rinderknecht
14	Apr. 25	GIS & Crowdsourcing + Student	Christian Grimando
		presentation for final project	
15	May. 2	Student presentation for final project	
	May 12	Final paper due	Final Paper due

Reading list

Week 1 E-governance: what is it?

Topics involved:

History and context for E-governance Open government and E-government Technocracy

Required readings:

- Esmark, A. (2016). Maybe It Is Time to Rediscover Technocracy? An Old Framework for a New Analysis of Administrative Reforms in the Governance Era. *Journal of public administration research and theory*, 27(3), 501–516. doi:10.1093/jopart/muw059
- Harrison, T. M., Guerrero, S., Burke, G. B., Cook, M., Cresswell, A., Helbig, N., Hrdinova, J., Pardo, T. (2012). Open government and e-government: Democratic challenges from a public value perspective. *Information Polity: The International Journal of Government & Democracy in the Information Age*, 17(2), 83-97. doi:10.3233/IP-2012-0269

Week 2 Conducting research on E-governance

Topics involved: E-Government Research Paperwork Reduction Act Communicative governance ICTs & Red Tape

Required readings:

Welch, E. W., & Pandey, S. K. (2007). E-Government and Bureaucracy: Toward a Better Understanding of Intranet Implementation and Its Effect on Red Tape. *Journal of public* administration research and theory, 17(3), 379-404. doi: 10.1093/jopart/mul013 Shapiro, S. (2013). The Paperwork Reduction Act: Benefits, costs and directions for reform. *Government Information Quarterly*, 30(2), 204-210. doi: <u>10.1016/j.giq.2012.09.002</u>

Heeks, R., & Bailur, S. (2007). Analyzing e-government research: Perspectives, philosophies, theories, methods, and practice. *Government Information Quarterly*, 24(2), 243-265.

Esmark, A. (2019). Communicative governance at work: how choice architects nudge citizens towards health, wealth and happiness in the information age. *Public Management Review*, 21(1), 138-158. doi:10.1080/14719037.2018.1473476

Week 3 Constructivist Perspective and Collaboration in E-Governance

Topics involved:

Social construction of technology Public Sector Collaboration

Co-production ICTs

Required readings:

Bijker, W. E. (2010). How is technology made?—That is the question! *Cambridge Journal of Economics*, 34(1), 63-76. doi:10.1093/cje/bep068

- Ramon Gil-Garcia, J., Chengalur-Smith, I., & Duchessi, P. (2007). Collaborative e-Government: impediments and benefits of information-sharing projects in the public sector. *European Journal of Information Systems*, 16(2), 121-133. doi:10.1057/palgrave.ejis.3000673
- Clark, B. Y., Brudney, J. L., & Jang, S.-G. (2013). Coproduction of Government Services and the New Information Technology: Investigating the Distributional Biases. *Public Administration Review*, 73(5), 687-701. doi:10.1111/puar.12092

Week 4 Assumptions in Studying Technology & E-Government Ethics

Topics involved:

Technology as a Hazardous concept E-Government ethics Artificial Intelligence

Required readings:

Marx, L. (1997). "Technology": The Emergence of a Hazardous Concept. Social Research, 965-988.

Roman, A. V. (2013). Framing the Questions of E-Government Ethics: An Organizational Perspective. *The American Review of Public Administration*. 45(2), 216-236. doi:10.1177/0275074013485809

Wirtz, B. W., Weyerer, J. C., & Geyer, C. (2019). Artificial intelligence and the public sector applications and challenges. *International Journal of Public Administration*, 42(7), 596-615.

Week 5 Privacy Governance

Topics involved:

Privacy Governance Algorithmic Governance

Required readings:

Bennett, C. J., & Raab, C. D. (2020). Revisiting the governance of privacy: Contemporary policy instruments in global perspective. *Regulation & Governance*, 14(3), 447-464.

Yeung, K. (2018). Algorithmic regulation: a critical interrogation. *Regulation & Governance*, 12(4), 505-523.

Week 6 Administrative Discretion & Administrative Burden

Topics involved: Street to System Bureaucracies Administrative burden Medicaid Rules

Required readings:

- Bovens, M., & Zouridis, S. (2002). From Street-Level to System-Level Bureaucracies: How Information and Communication Technology is Transforming Administrative Discretion and Constitutional Control. *Public Administration Review*, 62(2), 174-184. doi: 10.1111/0033-3352.00168
- Moynihan, D., Herd, P., & Harvey, H. (2015). Administrative Burden: Learning, Psychological, and Compliance Costs in Citizen-State Interactions. *Journal of public administration research and theory*, 25(1), 43-69. doi:10.1093/jopart/muu009
- Moynihan, D. P., Herd, P., & Ribgy, E. (2016). Policymaking by other means: Do states use administrative barriers to limit access to Medicaid?. *Administration & Society*, 48(4), 497-524.

Week 7 Crowdfunding public projects

Topics involved:

Technology in Nonprofits Nonprofit Virtual Accountability Crowdfunding public projects

Required readings:

- McNutt, J., Guo, C., Goldkind, L., & An, S. (2018). Technology in nonprofit organizations and voluntary action. *Voluntaristics Review*, 3(1), 1-63.
- Dumont, G. E. (2013). Nonprofit virtual accountability: An index and its application. *Nonprofit and Voluntary Sector Quarterly*, 42(5), 1049-1067.
- Hong, S., & Ryu, J. (2019). Crowdfunding public projects: Collaborative governance for achieving citizen co-funding of public goods. *Government Information Quarterly*, 36(1), 145-153.

Week 10 Social media and governance

Topics involved:

Social media

Citizen interaction

Required readings:

- Linders, D. (2012). From e-government to we-government: Defining a typology for citizen coproduction in the age of social media. *Government Information Quarterly*, 29(4), 446-454. doi: 10.1016/j.giq.2012.06.003
- Reddick, C. G. (2005). Citizen interaction with e-government: From the streets to servers? *Government Information Quarterly*, 22(1), 38-57. doi: 10.1016/j.giq.2004.10.003

Week 11 Smart Cities

Topics involved: Smart cities ICTs & Automation ICTs & Telework

Required readings:

Chourabi, H., Nam, T., Walker, S., Gil-Garcia, J. R., Mellouli, S., Nahon, K., ... & Scholl, H. J. (2012, January). Understanding smart cities: An integrative framework. In 2012 45th Hawaii international conference on system sciences (pp. 2289-2297). IEEE.

Wenger, J. B., & Wilkins, V. M. (2009). At the discretion of rogue agents: How automation improves

women's outcomes in unemployment insurance. Journal of Public Administration Research and Theory, 19(2), 313-333.

Bae, K. B., & Kim, D. (2016). The impact of decoupling of telework on job satisfaction in US federal agencies: Does gender matter?. *The American Review of Public Administration*, 46(3), 356-371.

Week 12 Civic Open Data

Topics involved:

Civic Open Data Cyber security

Required readings:

- Sieber, R. E., & Johnson, P. A. (2015). Civic open data at a crossroads: Dominant models and current challenges. *Government Information Quarterly*, 32(3), 308-315. doi:b10.1016/j.giq.2015.05.003
- Weiss, M., & Jankauskas, V. (2018). Securing cyberspace: How states design governance arrangements. *Governance*. doi:10.1111/gove.12368

Week 13 Database Governance

Topics involved: Digital Platforms Database Governance Personal Data Governance

Required readings:

- De Reuver, M., Sørensen, C., & Basole, R. C. (2018). The digital platform: a research agenda. *Journal of Information Technology*, 33(2), 124-135.
- Peeters, R., & Widlak, A. (2018). The digital cage: Administrative exclusion through information architecture The case of the Dutch civil registry's master data management system. *Government Information Quarterly*, 35(2), 175-183. doi: 10.1016/j.giq.2018.02.003
- Sharman, J. C. (2009). Privacy as roguery: personal financial information in an age of transparency. *Public administration*, 87(4), 717-731. doi: 10.1111/j.1467-9299.2009.01785.x

Week 14 Volunteered Geographic Information

Topics involved:

GIS & Crowdsourcing

Required readings:

Zook, M., Graham, M., Shelton, T., & Gorman, S. (2010). Volunteered Geographic Information and Crowdsourcing Disaster Relief: A Case Study of the Haitian Earthquake. *World Medical & Health Policy*, 2(2), 7-33. doi:10.2202/1948-4682.1069