

Course Announcement

Strengthening Democracy Through Technology

Digital revolution in the form of social networking, artificial intelligence and big data, and near ubiquitous access to sophisticated computing devices and information is shaping our democratic process—for better or worse. There is a general belief that our entire democratic process is under siege due a variety of factors such as rampant disinformation online, corruption/distortion of the political process by narrow interests, insufficient critical thinking skills, voter suppression/disenfranchisement activities, and rampant polarization and inability to bridge divides. The main goal of this interdisciplinary course is to gain an understanding of how current technology is impacting the democratic process and how we can strengthen democracy through technology. The course will consist of reading papers and discussing relevant topics in class, and working on team projects.

Course Number: CSCI 7000

Credit Hours: 3.0

Term: Spring 2019

Time and Location: Tuesdays and Thursdays: 9:30 – 10:45 AM in ECCR 139

Instructor: Shivakant Mishra, Professor, Computer Science, CU-Boulder

Instructor Contact: mishras@colorado.edu; (303)492-4686

This course takes the view that the problems our democratic system is facing due to digital revolution are very complex and would require a multidisciplinary effort to address them. To this end, the course is intended for students from diverse backgrounds such as Computer Science, Political Science, Education and Sociology. If the course description interests you, please contact the instructor.

No Prior Programming Experience is Needed to Take This Course.

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Instructor

- Name: Shivakant Mishra
- Office: ECCR 1B22
- Office Hours: Monday: 11:00 AM-12:00 Noon; Thursday: 1:00-2:00 PM
- Phone: (303) 492-4686
- Email: *mishras@cs.colorado.edu*

Short Description

Digital revolution in the form of social networking, artificial intelligence and big data, and near ubiquitous access to sophisticated computing devices and information is shaping our democratic process—for better or worse. There is a general belief that our entire democratic process is under siege due a variety of factors such as rampant disinformation online, corruption/distortion of the political process by narrow interests, insufficient critical thinking skills, voter suppression/disenfranchisement activities, and rampant polarization and inability to bridge divides. The main goal of this interdisciplinary course is to gain an understanding of how current technology is impacting the democratic process and how we can strengthen democracy through technology. The course will consist of reading papers and discussing relevant topics in class, and working on term papers.

Prerequisite

- This course takes the view that the problems our democratic system is facing due to digital revolution are very complex and would require a multidisciplinary effort to address them. To this end, the course is intended for students from diverse backgrounds such as Computer Science, Political Science, Education and Sociology. If the course description interests you, please contact the instructor.
- No prior programming experience is needed to take this course.

Class webpage

CSCI 7000–Strengthening Democracy Through Technology at
<http://moodle.cs.colorado.edu>

Grading (*Tentative*)

- Topic presentations, discussion and term paper: 60%
- Topic discussions (both online and in-class) and class attendance: 40%

ACCOMMODATION FOR DISABILITIES

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the [Disability Services website](#). Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see [Temporary Medical Conditions](#) under the Students tab on the Disability Services website.

CLASSROOM BEHAVIOR

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on [classroom behavior](#) and the [Student Code of Conduct](#).

HONOR CODE

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu); 303-492-5550). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the [Honor Code Office website](#).

SEXUAL MISCONDUCT, DISCRIMINATION, HARASSMENT AND/OR RELATED RETALIATION

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (including sexual assault, exploitation, harassment, dating or domestic violence, and stalking), discrimination, and harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, [anonymous reporting](#), and the campus resources can be found on the [OIEC website](#).

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

RELIGIOUS HOLIDAYS

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please notify me of any anticipated conflicts due to religious obligations as early in the semester as possible (at least two weeks before) so that there is adequate time to make necessary arrangements.

See the [campus policy regarding religious observances](#) for full details.

CLASS ATTENDANCE

You are expected to attend all lectures and stay up-to-date with the material posted on the class webpage. If you miss a lecture, you are responsible for finding out the material covered in that lecture. If you miss an exam or a quiz, a grade of zero will be assigned, unless the you explicitly receive a permission from the instructor. The instructor will grant permissions for only valid reasons.

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Course Activities

This course is organized as a sequence of weekly presentation and discussion of relevant topics. In the first two weeks of the semester, we will discuss and finalize a list of topics that are highly relevant to the general theme of the relationship between democracy and technology, impact of technology on democracy, and how technology can strengthen democracy. From then onwards, a student team, instructor or a guest lecturer will provide a well-researched presentation of a topic chosen from the list in Tuesday's lecture, and facilitate a class discussion on that topic in Thursday's lecture. In addition, there will be online discussions on each topic on Moodle.

Topic presentations in class

As part of a student team (two/three students per team depending on the total class enrollment), you will choose a relevant topic, perform a thorough research of that topic, prepare a presentation, and present it in class in Tuesday's lecture. Your research should include reading scholarly papers published in peer-reviewed journals and conferences as well as appropriate news articles, editorials, opinion pieces, etc. As you are researching your topic, ensure to keep a focus on the relevance to the general themes of the course - relationship between democracy and technology, impact of technology on democracy, and how technology can strengthen democracy. Each team will choose and present two topics.

You must meet me regularly a few times (2-3 times) during my office hours to discuss the topic and your on-going research sufficiently in advance of your scheduled presentation. The goal of your presentation is to provide a survey of the topic and the current state-of-the-art. Your presentation must describe the topic clearly, its role in democracy, current state of the art in terms of what impact the technology has had, case studies, etc. You must submit your presentation slides to me by email by 12 Noon on the day before your scheduled presentation. I will put your slides on Moodle, so that everyone can access it.

You will receive a grade for your presentation in class. This grade will be based on the thoroughness of your research, how well you do your presentation, and whether you discussed your topic with me while performing your research, submitting presentation slides on time, etc. All members of a team will receive the same grade, unless there is some exceptional situation.

Topic discussion (in-class and online)

In addition to your presentation in Tuesday's lecture, you will facilitate a discussion among everyone (in class on Thursday as well as online) on your chosen topic. The

goal of the discussion is to shed new light on the topic, deliberate and debate specifics as well as brainstorm ways on how technology may be used to address any shortcomings or limitations and strengthen democracy. To do so, you should prepare a few points related to the topic for discussion and post them online in advance. For each topic, I will create a discussion link on Moodle where everyone can discuss the topic.

Each team will be graded for how well the discussion is facilitated in terms of liveliness and content. In addition, everyone will be graded for their participation in topic discussions, both in-class and online. To this end, it is imperative that you attend all classes.

Topic report

Based on your research and in-class/online discussion, you will write and submit a report. This report must provide a complete coverage of the topic in terms of the current state-of-the-art and how technology may help address any shortcomings or limitations as well as strengthen democracy. Your report will be due within two weeks of your presentation. Again, all team members will receive the same grade, unless there is some exceptional situation.

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Projects

Student Names	Project Title
Gregory Gondwe and Brett Shouse	Data Colonization: Using data to influence democracy
Nicolai Michelet and Kylen Solvik	Social Bots and Democracy
William Temple and Avimita Chatterjee	Transgression as a Core Value in Cyberspace
Dwight J. Browne and Emily Adams	YouTube and Democracy
Dwight J. Browne and Avimita Chatterjee	Corporate Influence on Democracy
Emily Adams	Digital Democracy: Expanding Our Definition
Nicolai Michelet and Kylen Solvik	Online Voting Systems
Gregory Gondwe and Brett Shouse	Privacy and Traceability in Democracy: Freedom in Anonymity and Accountability in Action

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01/15 Discuss syllabus

01/17 Intro to the course

01/22 Intro continued + topic discussion

01/24 topic + discussion

01/29 guest lecture: Brian Keegan

01/31 guest lecture discussion

02/05 guest lecture: Colin Kiely

02/07 guest lecture discussion

02/12 student presentation: Gondwe, Gregory and Shouse, Brett

02/14 student presentation discussion

02/19 Lecture: Shiv

02/21: No class

02/26 student presentation: Michelet, Nicolai and Solvik, Kylan

02/28 student presentation discussion

03/05 student presentation: Adams, Emily and Browne, Dwight

03/07 student presentation discussion

03/12 student presentation: Chatterjee, Avimita and Temple, William

03/14 student presentation discussion

03/19 guest lecture: Ben Shapiro

03/21 guest lecture discussion

03/26: Spring break

03/28: Spring break

04/02 student presentation: Gondwe, Gregory and Shouse, Brett

04/04 student presentation discussion

04/09 CWA lecture (tentative)

04/11 CWA lecture discussion: Lis Smith,

04/16 student presentation: Michelet, Nicolai and Solvik, Kylan

04/18 student presentation discussion

04/23 student presentation: Adams, Emily and Browne, Dwight

04/25 student presentation discussion

04/30 student presentation: Chatterjee, Avimita and Temple, William

05/02 student presentation discussion