



## Learning Outcomes

This class will introduce you to fundamental ideas in information science, a multidisciplinary field that studies the **intersection of information, technology, and people**.

Most individuals, organizations, and governments are quick to adopt new technologies, but rarely take the time to consider how that technology is shaping their behaviors and, conversely, how users shape the development of future technologies. Successful completion of this course will give you the conceptual tools necessary to understand the social, political, and economic factors associated with a networked society. Issues will range from the *theoretical* (what is information and how do humans construct it?), to the *cultural* (how are newer communication technologies different from earlier distance-shrinking and knowledge-building technologies such as telephones?), to the *technical* (what are the basic architectures of computing networks?).

As a core BSIS course, this class will also provide you a knowledge-based foundation for future courses in information, technology, and policy.

After successfully completing this course you will be able to:

- Demonstrate knowledge of fundamental concepts and ideas around the rise of the information society.
- Demonstrate critical thinking in evaluating causal arguments regarding the relationship between technology and society, including analyzing major assertions, background assumptions, and explanatory evidence.
- Explain how information & communication technologies (ICTs) shape national and global events.
- Use information technologies to conduct research and to communicate effectively about ICTs.
- Articulate how the historical events leading to the information society have shaped our modern-day use of ICTs.
- Articulate ways technology use can be problematic, and how to harness technology for positive change.
- Work collaboratively to create and disseminate information content broadly.

## Required Resources

There are no required textbooks for this class. All learning materials will be provided on the course ELMS page. We will be using the mobile/web version of Turning Point instead of physical “clickers.” You must register for a (free) license through UMD if you have not done so for a previous class. You can download an app for iOS/Android or use a browser-based version. Visit the Students section of [clickers.umd.edu](http://clickers.umd.edu) for details.

**Dr. Joel Chan**

[joelchan@umd.edu](mailto:joelchan@umd.edu)

### Class Meets

Mon/Wed/Fri

10:00am – 10:50am

TWS #0310

### Office Hours

HBKS 2118E

Mon/Wed 4:00-5:30pm

[appointments recommended](#)

### Teaching Assistant

Devika Raj: [devika.rsp@gmail.com](mailto:devika.rsp@gmail.com)

Office Hours Wed 11a-1p, HBKN,  
Ground Floor (outside iSchool  
Undergraduate Student Services)

### Course Communication

- Time-sensitive announcements will be posted on ELMS and e-mailed to the class listserv ([inst201-0102-fall18@coursemail.umd.edu](mailto:inst201-0102-fall18@coursemail.umd.edu)).
- Email *general* questions, to the class listserv. If you're unsure if question is general, assume it's general – if you have a question, someone else probably does/will too!
- Email questions that are *specific to you* (e.g., extensions) to Dr. Chan. You must include “[INST 201]” in the subject. I will reply to e-mails usually within 24 hours (not counting weekends). Feel free to send a reminder if I have not replied within that time frame. However, do not expect me to respond between 6pm and 9am or on weekends.

## Campus Policies

It is our shared responsibility to know and abide by the University of Maryland's policies that relate to all courses, which include topics like:

- Academic integrity
- Student and instructor conduct
- Accessibility and accommodations
- Attendance and excused absences
- Grades and appeals
- Copyright and intellectual property

Please visit [www.ugst.umd.edu/courserelatedpolicies.html](http://www.ugst.umd.edu/courserelatedpolicies.html) for the Office of Undergraduate Studies' full list of campus-wide policies and follow up with me if you have questions.

## Class Structure

This course involves lectures, in-class activities, engagement with current events, and a team project. I have created a number of activities to engage students in discussion about that week's topic, so you should **complete the assigned readings/videos/audio before class** (see ELMS for reading assignments). You can expect to spend about 1-2 hours or so engaging with these materials; you will be held accountable for being prepared for class by completing a content quiz on the materials due at the beginning of the first lecture each week.

When engaging in a class discussion, be respectful of others in the room. Any student who cannot do this will be asked to leave the classroom for the remainder of that class.

Laptops are generally discouraged in this class; we have a limited amount of time each meeting and we want to ensure everyone can engage with the course content. **If you need access to your laptop throughout class, please sit in one of the last two rows** (exceptions are made for students who have spoken with me directly about their need to use their laptop and sit closer to the front). That said, we will be doing activities throughout the semester that require you to have internet access. On those occasions, I will make an announcement in class to get out your phone, tablet, or laptop. Why do I have this policy? Because there's [a lot of evidence](#) that hand-written notes are retained better and the other things on your device (social media, online forums, etc.) are highly distracting.

In general, be aware of the people around you and avoid doing things that will disturb them or otherwise prevent them from fully engaging with the content. Put your phones on silent before the start of class. If you need to make/take a phone call, leave the classroom before doing so. **Any student creating a disruption will be asked to leave for the day.**

## Activities and Learning Assessments

Your final grade will be based on the following components (full details for each assignment available on ELMS).

Learning Assessments	#	Category Weight
<b>Pre-Class Content Quizzes (CQ):</b> pre-class quizzes on the week's reading, submitted on ELMS. Lowest 2 grades are dropped.	14 (approx.)	15%
<b>Post-Class Reflections (PR):</b> reflections on key concepts to be submitted shortly after / the day of class. Graded as for-credit (completed/not). Only 39 count towards your grade.	40+ (approx.)	15%
<b>Interactive Learning &amp; Reflection Assignments (ILRA):</b> "hands-on" activities with short writing assignments.	6	25%
<b>Midterm Exam (EX1)</b>	1	15%
<b>Final Exam (EX2)</b>	1	20%
<b>Team Project (TP):</b> Viral content team project.	5	10%

- **Pre-class Content Quizzes (15%).** To ensure everyone is on the same page in terms of preparation, quizzes on the readings will be due on ELMS at the beginning of the first lecture of each week that has new readings. These short quizzes will consist of simple multiple choice, matching, and true/false questions designed only to make sure that you are keeping up with the readings. There are no trick questions. If you have done the readings, you will get a good grade on the quiz. There will be 15 quizzes total; your lowest 2 grades will be dropped.
- **Post-Class Reflections (15%).** At the end of each lecture, you will be asked to respond to 1-2 questions on ELMS, reflecting on the content of the class. For example, after a lecture on information security, you might be asked “What (about people) makes information/computer security hard?”. I use these responses to get a sense for how well the class is engaging with the materials and concepts - I use that to guide my teaching (e.g., revisit concepts that many people are confused by). These activities will be graded as participation; that is, they are pass (you were present and participated) or fail (you did not participate). To give you feedback, I will collect common misconceptions, good answers, and my own answers to these reflection questions in a shared [Google doc](#) (this can serve as a jumping off point for your study guide!). To give you an idea of the depth of thought I'm expecting, I'm aiming for you to be able to quickly respond to these in about 5-10 minutes at most. These will be due at the end of the day on the same day as lecture. There will be 42 reflections total (1 for each session, not including exams); I'll only count 39 reflections toward your grade.
- **Interactive Learning & Reflection Assignments (25%).** These assignments will consist of a “real world” activity, combined with a 250-500 word reflection on the experience. Details on each assignment will vary but may involve you traveling around College Park, working with classmates, and/or taking pictures of things you see, among other things.
- **Viral Content Team Project (10%).** Understanding how information is created, distributed, and consumed is a critical component of nearly any job in the information sector. In your future classes and careers, you'll likely be creating and consuming content, searching for and sharing information, and trying to predict what will happen tomorrow. These activities require you to understand your audience and tailor your information practices to them. For this project, you will form teams of **4-5 people**. The goal of this assignment is to create a piece of **original** content that goes viral. How do we measure virality? Quite simply, virality is about exposure. Most sites have metrics built into them to measure virality, but one component of this project is to create content where spread can be easily captured.
  - **TP-01: Meme Proposal (2%)** – Your team will develop two potential memes and present them both in a short paper. *NOTE:* Teams cannot create any content that includes profane, disparaging, or inflammatory content or use any illegal measures to create, disseminate, or collect views for their content. Your content must be original; do not use content that has previously gone viral.
  - **TP-02: Proposal Peer Review (2%)** — Individually (not as a group) you will review another team's meme proposal and provide them with constructive feedback.
  - **TP-03: Study Plan and Final Meme (2%)** – Along with your final meme to be deployed, your team will compose a brief specification of your expectations for how your selected meme will do “in the wild”, where you will deploy it, and how you plan to track its progress (e.g., what data will be collected and how). Then you will deploy your meme in the wild!
  - **TP-04: Debrief Powerpoint & Presentation (2%)** — Your team will give a short (3 minute max) presentation to the class discussing the success or failure of your meme, including data collected as specified in your study plan.
  - **TP-05: Project Reflection (2%)** — Your team will compose a brief reflection paper discussing the success or failure of your meme, including data collected as specified in your study plan, and how your experiences relate to issues of virality we have discussed in the course.

- **Midterm Exam (15%).** The midterm exam will cover class content from Weeks 1 through 7 (Units 1-2). It will consist of multiple-choice questions and short-answer questions worth a total of 100 points.
- **Final Exam (20%).** The final exam will cover all class content, with an emphasis on content from Weeks 8 through 14 (Units 3-4). It will consist of multiple-choice questions and short-answer questions worth a total of 150 points.
- **Extra Credit Activities.** Extra credit activities of varying point values **may** become available. You will be able to use extra credit to add **at most 5%** to your final grade (e.g., if you ended up with 85 grade points).

## Grades

Grades are not given, but earned. Your grade is determined by your performance on the learning assessments in the course. If earning a particular grade is important to you, please speak with me at the beginning of the semester so that I can offer some helpful suggestions for achieving your goal.

All assessment scores will be posted on the course ELMS page. If you would like to review any of your grades (including the exams), or have questions about how something was scored, please email me to schedule a time for us to meet in my office. I am happy to discuss your grades with you, and if I have made a mistake I will immediately correct it. Any formal grade disputes must be submitted in writing and within one week of receiving the grade.

Final letter grades are assigned based on the total points earned. To be fair to everyone I have to establish clear, consistent standards, so please understand that being close to a cutoff is not the same this as making the cut (89.99  $\neq$  90.00). It would be unethical to make exceptions for some and not others. I do not round grades up. **I will not respond to email requests for a grade bump at the end of the semester.** The cutoffs are as follows:

Final Grade Cutoffs									
+	97.00%	+	87.00%	+	77.00%	+	67.00%		
A	94.00%	B	84.00%	C	74.00%	D	64.00%	F	<60.0%
-	90.00%	-	80.00%	-	70.00%	-	60.00%		

## Missed Deadlines

If you will not be able to meet an assignment deadline, contact Dr. Chan **before the due date** to explain why you will need to submit the assignment late and what your plan is; these will be evaluated on a case-by-case basis.

Unless prior permission has been granted, **no late work is accepted**. This policy is in place to ensure 100 students have their work returned to them in a timely fashion. Please prepare in advance so that you will not encounter technical difficulties that may prevent submission of a given assignment. If you have a conflict with the due date, assignments can always be submitted early. Generally speaking, illnesses are not an excuse for late assignments because you will receive the assignments at least one week before they are due. Missing a deadline can be at least partially compensated for by completing extra credit activities.

*Note:* Exams are not included in the missed deadlines policy. See next section.

## Exam Policy

If you need to miss an exam because of outside circumstances (e.g., a religious holiday, military duties, work/athletic team travel), you must email me **before the exam** to reschedule your exam time. If you are sick on an exam day, you must provide me with a doctor's note to be excused ([see the UMD policies on absences](#)) and should email me before the exam time to let me know you're sick. If you miss an exam due to other circumstances (e.g., oversleeping), you will not be able to make up the exam.

## Collaboration, Group Work, and Academic Integrity in INST 201

**All of the individually graded assessments must be completed independently.** You are welcome (and highly encouraged) to study and discuss the course material with your peers, but providing or receiving quiz/exam answers or letting someone else contribute to your writing assignment constitutes academic dishonesty. Penalties for academic dishonesty can include a 0 on the assignment or an automatic failure and "XF" on your transcript.

**For the team project assignments, you may and should collaborate with members of your team** (but not other teams). To address social loafing, you will be asked to complete confidential individual peer reviews of your teammates—team members who do not pull their weight may receive a different grade than the rest of the team.

**The Content Quizzes (CQ) are open-book.** This means that you may consult the readings or your notes (but not another person) as you take the quiz. **Exams (EX) are closed-book.**

## Accommodations

Students with disabilities should inform me of their needs at the beginning of the semester. Please also contact the Disability Support Services (301-314-7682 or <http://www.counseling.umd.edu/DSS/>). DSS will make arrangements with you and me to determine and implement appropriate academic accommodations. Inclusion is one of the iSchool's core values, and I have attempted to make all materials and assignments accessible to people with varying abilities. However, if there is something else I can do to make the class more accessible please schedule a time to come talk to me. This will benefit not only yourself but also my future students.

## Get Some Help!

You are expected to take personal responsibility for your own learning. This includes acknowledging when your performance does not match your goals and doing something about it. Everyone can benefit from some expert guidance on time management, note taking, and exam preparation, so I encourage you to consider visiting <http://ter.ps/learn> to schedule an appointment with an academic coach. Sharpen your communication skills (and improve your grade) by visiting <http://ter.ps/writing> and schedule an appointment with the campus Writing Center. Finally, if you just need someone to talk to, visit <http://www.counseling.umd.edu>.



Everything is free because you have already paid for it, and **everyone needs help...** all you have to do is ask for it.

## Names/Pronouns and Self Identifications

The University of Maryland recognizes the importance of a diverse student body, and we are committed to fostering equitable classroom environments. I invite you, if you wish, to tell us how you want to be referred to both in terms of your name and your pronouns (he/him, she/her, they/them, etc.). The pronouns someone indicates are not necessarily indicative of their gender identity. Visit [trans.umd.edu](http://trans.umd.edu) to learn more.

Additionally, how you identify in terms of your gender, race, class, sexuality, religion, and dis/ability, among all aspects of your identity, is your choice whether to disclose (e.g., should it come up in classroom conversation about our experiences and perspectives) and should be self-identified, not presumed or imposed. I will do my best to address and refer to all students accordingly, and I ask you to do the same for all of your fellow Terps.

## Students in Need

Students encountering psychological problems that hamper their course work are referred to the Counseling Center (301-314-7651 or <http://www.counseling.umd.edu/>) for expert help. For more information on UMD's Student Services, see <http://www.studentaffairs.umd.edu/student-life>

If you or someone you know feels unsafe, the university has resources (see list below). Read more about hate-based crimes here: [https://ocrsm.umd.edu/files/Hate Bias FAQs final.pdf](https://ocrsm.umd.edu/files/Hate_Bias_FAQs_final.pdf)

Name	Phone	Website
University Counseling Center	301-314-7651	<a href="http://www.counseling.umd.edu">www.counseling.umd.edu</a>
University Health Center and Mental Health Services	301-314-8180	<a href="http://www.health.umd.edu">www.health.umd.edu</a>
University of Maryland Chaplains		<a href="http://thestamp.umd.edu/memorial_chapel/chaplains">thestamp.umd.edu/memorial_chapel/chaplains</a>
Office of Civil Rights and Sexual	301-405-1142	<a href="http://www.ocrsm.umd.edu">www.ocrsm.umd.edu</a>

## Tips for a Successful Semester

(Adapted from *Dr. Vitak's Tips for a Successful Semester* by Jessica Vitak.)

1. Come to class prepared. This includes completing any assignments and readings *before* class.
2. Take the worksheet quizzes seriously. They aren't worth many points but they are excellent practice for the exams.
3. Struggling to keep up with all the reading? Check out [\*How to Read a Book\*](#), which provides highly useful advice on reading quickly without losing comprehension.
4. Struggling with classes in general? Talk to me, friends, family, and/or the counseling center. I will work with you to help you succeed.
5. Engage in class discussions. Ask questions. Share your opinions. Be open to others' viewpoints, even if they're different than your own.
6. Have a question outside of class? Email me anytime. Make sure to include the course number ([INST 201]) in the subject line to ensure I see it. I will respond within 48 hours (not counting weekends). Do **not** email me multiple times if I have not responded and fewer than 48 hours have passed. After that time, please send me a reminder email.
7. Visit me or the TAs during our office hours to talk about course content or anything else on your mind.
8. Know your rights as an undergraduate student at UMD: [University of Maryland Policies for Undergraduate Students](#)
9. Have fun!

## Course Schedule

This is the initial draft of the course schedule to give a birds-eye view of the overall schedule. The details of the schedule are subject to change: I will notify you of major changes. In general you can expect the composition of the class (number/nature of assignments) to be constant, but the exact *timing* and *content* of the assignments might be tweaked (e.g., in response to how the class is tracking with concepts). However, those of you who like to plan ahead can expect all of these elements to remain stable at least 2-3 weeks out from your current time. Please consult the weekly summary pages on ELMS for the most current links to the assignments and required readings/audio/video for the week (which will be the basis for your Content Quiz due before the start of the week).

WEEK	WHAT'S DUE?	TOPICS	MATERIALS
<b>UNIT 1: What is information? #info</b>			
<b>1</b> M 8/27 W 8/29 F 8/31	<b>Wed: CQ-01</b>	<u>Introduction</u> Intro to Class What is Information?	<ul style="list-style-type: none"> <li>Fundamentals of Information Studies, Ch. 2 (Lester &amp; Koehler, 2007)</li> </ul>
<b>2</b> <b>Labor Day</b> W 9/5 F 9/7	<b>Wed: CQ-02</b> <b>Fri: ILRA-01</b> (Information Scavenger Hunt)	<u>Information Economics</u> Information as an economic good Information as memes	<ul style="list-style-type: none"> <li>Information economics and the Internet by Coeira</li> <li>Chapter 11 (Into the Meme Pool) in The Information by Gleick</li> </ul>
<b>UNIT 2: Information and Technology #infoXtech</b>			
<b>3</b> M 9/10 W 9/12 F 9/14	<b>Mon: CQ-03</b>	<u>History and Foundations of Information Technology</u> The Information Society 1500s to now	<ul style="list-style-type: none"> <li>The Victorian Internet: Chapter 12, The Legacy of the Telegraph</li> <li>[Video] SciShow: How the Internet Was Invented</li> <li>[Video] How the Web Became a Thing</li> </ul>
<b>4</b> M 9/17 W 9/19 F 9/21	<b>Mon: CQ-04</b> <b>Fri: ILRA-02</b> (Day w/o Data)	<u>New Affordances</u> Mobile Technology Social Technology	<ul style="list-style-type: none"> <li>Mobile Phones Have Changed the World, For Better or Worse (The Guardian)</li> <li>The four affordances of online networks. Part one: Persistence</li> </ul>
<b>5</b> M 9/24 W 9/26 F 9/28	<b>Mon: CQ-05</b> <b>Fri: TP-01</b> (Meme proposal)	<u>Going Social</u> Going Viral Online Communities	<ul style="list-style-type: none"> <li>“What makes a video go viral? An analysis of emotional contagion and Internet memes” by Guadango (focus on intro and discussion for key concepts)</li> </ul>

			<ul style="list-style-type: none"> <li>• “Viral Dreams” Chapter in Terms of Service by Silverman (focus on introduction on pp65-68)</li> <li>• Chapter 4 in Baym’s <i>Personal Connections in the Digital Age</i> (on ELMS; focus on "Online Community" section on pp82-100)</li> </ul>
<b>6</b> M 10/1 W 10/3 F 10/5	<b>Mon: CQ-06</b> <b>Fri: TP-02</b> (Peer review)	<u><b>Data and Algorithms</b></u> Quantified Self Algorithms	<ul style="list-style-type: none"> <li>• Gary Wolf: The quantified self [TED]</li> <li>• Crash Course Computer Science: Machine learning &amp; artificial intelligence [YouTube]</li> </ul>
<b>7</b> M 10/8 W 10/10 F 10/12	<b>Mon: CQ-07</b>	<u><b>Security</b></u> Security F: Midterm Exam Review	<ul style="list-style-type: none"> <li>• The Motherboard Guide to not Getting Hacked (Motherboard)</li> </ul>
<b>UNIT 3: Information and People #infoXpeople</b>			
<b>8</b> M 10/15 W 10/17 F 10/19	<b>Mon: EX-1</b> <b>Wed: CQ-08</b>	<u><b>Information Literacy</b></u> M: Exam Information Literacy	<ul style="list-style-type: none"> <li>• Did Media Literacy Backfire? (Data &amp; Society)</li> <li>• The Fallacy of the ‘Digital Native’: Why Young People Need to Develop their Digital Skills</li> </ul>
<b>9</b> M 10/22 W 10/24 F 10/26	<b>Mon: CQ-09</b> <b>Fri: ILRA-03</b> (Information Organization)	<u><b>Information Behavior</b></u> Information Seeking Information Organization	<ul style="list-style-type: none"> <li>• Case - Looking For Information, Chapter 1</li> <li>• Metadata? Thesauri? Taxonomies? Topic Maps! Making Sense of it all</li> </ul>
<b>UNIT 4: Information Technology and Society #infoXtechXsociety</b>			
<b>10</b> M 10/29 W 10/31 F 11/2	<b>Mon: CQ-10</b> <b>Fri: ILRA-04</b> (Wikipedia Critique)	<u><b>Frameworks</b></u> Tech & Society Information Ethics	<ul style="list-style-type: none"> <li>• Technological Determinism vs Social Construction of Technology</li> <li>• “Four Ethical Issues of the Information Age”, by Richard Mason</li> </ul>
<b>11</b> M 11/5 W 11/7 F 11/9	<b>Mon: CQ-11</b> <b>Fri: TP-03</b> (Final Meme and Study Plan)	<u><b>Privacy and Surveillance</b></u> Privacy Surveillance	<ul style="list-style-type: none"> <li>• "Networked Privacy", by danah boyd</li> <li>• Edward Snowden: The untold story [2014, Wired]</li> </ul>

<p><b>12</b> M 11/12 W 11/14 F 11/16</p>	<p><b>Mon: CQ-12</b> <b>Fri: ILRA-05</b> (Online Harassment)</p>	<p><u><b>AI for good/ill</b></u> Algorithmic Bias/Openness AI</p>	<ul style="list-style-type: none"> <li>• Asking the Right Questions about AI, by Yonatan Zunger</li> <li>• Can we trust the numbers? [NPR/TED] Required segments are: Cathy O'Neil and Joy Buolamwini, 0:00-23:00; Anne Milgram, 40:00-50:00</li> </ul>
<p><b>13</b> M 11/19 <b>Thanksgiving</b></p>	<p><b>Mon: CQ-13</b></p>	<p><u><b>Online Antisocial Behavior</b></u> Harassment/Trolls</p>	<ul style="list-style-type: none"> <li>• “The Real Name Fallacy”, by J. Nathan Matias [The Coral Project]</li> </ul>
<p><b>14</b> M 11/26 W 11/28 F 11/30</p>	<p><b>Mon: CQ-14</b> <b>Fri: TP-04</b> (Powerpoint)</p>	<p><u><b>InfoTech and Democracy</b></u> New Media Political change</p>	<ul style="list-style-type: none"> <li>• “Four problems for news and democracy”, by Ethan Zuckerman</li> <li>• “Online social change: easy to organize, hard to win”, by Zeynep Tufekci [TED talk]</li> </ul>
<p><b>Coda</b></p>			
<p><b>15</b> M 12/3 W 12/5 F 12/7</p>	<p><b>Thu: ILRA-06</b> (Dystopian Futures)</p>	<p><u><b>Wrapping Up</b></u> MW: Project Presentations Looking Forward</p>	<p>(optional, no CQ on content)</p> <ul style="list-style-type: none"> <li>• “My Dated Predictions”, by Rodney Brooks</li> <li>• Minority Report: 6 predictions that came true, 15 years on</li> </ul>
<p><b>16</b> M 12/10</p>	<p><b>Fri: TP-05</b> (Project Reflection)</p>	<p><u><b>Exam Review</b></u> Exam Review</p>	
<p><b>17</b> M 12/18</p>		<p><u><b>Final Exam</b></u></p>	<p>Monday, 12/18, 8:00am – Final Exam in TWS 0310 (I don't like it any more than you do.)</p>