Introduction to Information Science

Learning Outcomes

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 course in the BSIS, 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

Course website: **elms.umd.edu**

There are no required textbooks for this class. All learning materials will be provided on the course ELMS page.

Joyce Garczynski
jgarczyn@umd.edu
she/her/hers

Class Meets
Online only
Spring Semester 2019
January 28 - May 22

Office Hours
Always reachable via email

Grader
Jessica Gomes:
jessicagomes1130@gmail.com

Course Communication
Time-sensitive announcements will be posted on ELMS.

Contact me via ELMS or by email (include "INST 201" in the subject).

I will reply to emails within 24 hours (not counting weekends). Generally I will reply much quicker than this, but wait 24 hours before re-sending me an email.

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 for the Office of Undergraduate Studies' full list of campus-wide policies and follow up with me if you have questions.

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!

Taking personal responsibility for you own learning means acknowledging when your performance does not match your goals and doing something about it. I hope you will come talk to me so that I can help you find the right approach to success in this course, and I encourage you to visit tutoring.umd.edu to learn more about the wide range of campus resources available to you. In particular, everyone can use some help sharpen their communication skills (and improving their grade) by visiting ter.ps/writing and schedule an appointment with the campus Writing Center. Finally, if you just need someone to talk to, visit 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 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

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

Activities, Learning Assessments, & Expectations for Students

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

Learning Assessments	#	Points Each	Category Total	Category Weight
Introductory Activity: Introduce yourself to the class	1	4	4	4%
Content Quizzes (CQ): Quizzes to assess comprehension of content presented in modules	10	4	40	40%
News Article Presentations: Analyze and present a news story related to the module content for your small group to discuss	1	10	10	10%
News Article Responses: Contribute to small group discussions about module-related news stories	8	2	16	16%
Interactive Learning Activities & Reflections (ILARs)	3	4	12	12%
Memes & Virality Group Project	1	15	15	15%
Final Reflection	1	3	3	3%
		Total Points:	**100**	

- **Introductory Activity (4%/due on Sun. 2/3)**. Introductions are an important part of building community, especially in online courses. For this assignment, I will introduce myself and provide a PowerPoint template on ELMS that you should use for your own introduction. Please feel free to customize the design of the PowerPoint, but you must have appropriate content on each slide in order to receive full credit.

- **Content Quizzes (40% total/4% each due on various dates).** To help you evaluate how well you comprehend the assigned readings, each module will have a quiz to assess your knowledge. These quizzes will be open note, but will be timed, so you should not take them if you have not been paying attention to the readings or course content.
- **News Article Presentations (10%/due on various dates)**. Early in the semester, you will sign up for a week to present a current news article related to the module for the week that you selected. Your presentation will summarize the content of the news story, connect the story to the class readings for that module, include a link to the story, and end with a prompt that encourages a small group of students to discuss the news story and/or the module. Please note that these presentations are **due on the Wednesdays** of the week that you selected. The reason for this is to give your classmates time to respond to the prompt that you created. Also, please note that presenting in a given week does not exempt you from the discussions--You still need to participate in the discussions in order to receive those points.
- **News Article Responses (16% total/2% over 8 weeks/due on various dates).** On the weeks of News Article Presentations, you can earn up to 2 points per week (1 point per response) by responding to the prompt that one of your classmates created. In order to receive a point for your response, you need to engage with the prompt and/or another classmate's response. A simple statement of agreement is not sufficient to earn the point. Please note that the News Article Presentations are due on Wednesdays so you will have **Thursdays through Sundays to respond**. Also, please note that presenting in a given week does not exempt you from these discussions--You still need to participate in the discussions in order to receive the News Article Responses points. Finally, please note that you can only earn 2 points per week (1 point per response). After you have earned your 2 points for the week, you cannot earn additional News Article Response Points for that week.
- **Interactive Learning Activities & Reflections (ILARs/12% total/4% each due on various dates).** There will be 3 assignments that will ask you to complete a "real world" activity, then write a 300-500 word reflection on the experience.
- **Memes & Virality Project (15%/multiple due dates)**. When this class meets in person, we do this assignment as a group activity, but for the online version, we're going to have it be an individual assignment with fewer parts, while maintaining the flavor of the original. For this project, you will consider what makes content go viral or not, try it out yourself, then create an infographic that helps explain virality to a public audience.
    - **Part 1 (5%)**: Propose the content you will disseminate in hopes of going viral. Submit your proposed content and justification (i.e., why you think it will work) via ELMS.
    - **Part 2 (2.5%)**. Get feedback from peers on your idea.
    - **Part 3 (5-point penalty for not completing)**: Disseminate content and take whatever steps you'd like to try to get it to go viral.
    - **Part 4 (7.5%)** Use your case to build an informative infographic. See ELMS for examples of infographics from prior semesters. Your content should be front and center in this infographic.
- **Final Reflection (3%/due on Fri. 5/17).** This is an informal course exit ticket that will help me improve the next time I teach this class. I will ask you about what you learned, what is still confusing, and what you'd like to see changed the next time I teach this course. In order to get full credit for completing this assignment, students will need to provide thoughtful and thorough responses.

Grades

Grades are not given, but earned. Your grade is determined by your performance on the learning assessments in the course and is assigned individually (not curved). 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 quizzes), or have questions about how something was scored, please email Jessica Gomes (the grader for the course first) and me to schedule a time to discuss.

Late work will not be accepted for course credit so please plan to have it submitted well before the scheduled deadline. Jessica and I are happy to discuss any of your grades with you, and if either of us have made a mistake we 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 percentage of total assessment points earned. To be fair to everyone I have to establish clear standards and apply them consistently, 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.

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%	

Late Assignments

A late penalty will be applied to any assignment that is submitted late (starting one minute beyond the due date and time).

Late assignments will be graded according to the following formula:
[grade on assignment] * 0.9^[number of days late]

For example, if you turn in a 10-point assignment 1 day late, and earned a 100% on that assignment, your final grade for that assignment would be $(1.00)(0.9^1)$, or 90%. If you turned in the same assignment 3 days late, and earned an 80%, your grade would be $(0.80)(0.9^3)$, or 58%. Therefore, although your grade will take a serious hit if the assignment is late, **in this class it is always better to turn in an assignment late than to not do it at all**. Note that late assignments may not be graded quickly.

Please prepare in advance so that you will not encounter technical difficulties that will result in your work receiving a late penalty. **Technical difficulties are not an excuse for late assignments — if you are having trouble submitting an assignment on Canvas, e-mail it to me before the deadline to avoid a penalty.** 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.

If you know you will not be able to meet an assignment deadline, contact me before the due date to explain why you will need to submit the assignment late; these will be evaluated on a case-by-case basis.

Quiz Policy

If you need to miss a scheduled quiz because of outside circumstances (e.g., a religious holiday, military duties, work/athletic team travel), you must email me by Monday, February 11 to reschedule your

quiz time. If you are sick on the day a quiz is due, you must provide me with a doctor's note to be excused (see the UMD policies on absences) and should email me before the quiz has ended to let me know you're sick. If you miss a quiz due to other circumstances (e.g., oversleeping), you will not be able to make up the quiz.

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 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. 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.

Tips for a Successful Semester

1. Come to online discussions prepared. This includes completing any assignments and readings before class. This also includes preparing effectively for the quizzes.
2. Take the content quizzes seriously. Each one isn't worth many points but together, they do add up.
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? Email me anytime. Make sure to include the course number (INST201) in the subject line to ensure I see it. I will respond within 24 hours (not counting weekends). Do not email me multiple times if I have not responded and fewer than 24 hours have passed. After that time, please send me a reminder email.
7. Know your rights as an undergraduate student at UMD: University of Maryland Policies for Undergraduate Students
8. Have fun!

Course Schedule

MODULE	TOPICS	REQUIRED READINGS/AUDIO/VIDEO AND ASSIGNMENTS
Week 1 **1/28 - 2/3**	● Course introduction ● Important info ● How to succeed in the course ● What do I do with a degree in InfoSci?	● Syllabus ● Lester & Koehler, Chapter 2 (**on ELMS**) ● Review InfoSci Career Resources (iSchool website) ● **DUE by 11:59pm EST on Sun. 2/3**: Introductory Activity
Week 2 **2/4 - 2/10**	● A brief history of Information & Communication Technologies (ICTs)--From the Printing Press to the Internet	● How Did the Printing Press Change History?, Wishnia (**on ELMS**) ● Chapter 12 (The Legacy of the Telegraph) in The Victorian Internet by Standage (**on ELMS**) ● How the Internet Was Invented, Part 1 (video) and Part 2 (video) ● Terry Gross interview with Andrew Blum (audio) ● **DUE by 11:59pm EST on Fri. 2/8**: Sign up for a News Article Presentation date and discussion group ● **DUE by 11:59pm EST on Sun. 2/10**: ILAR #1 ● **DUE by 11:59pm EST on Sun. 2/10**: Content Quiz #1
Week 3 **2/11 - 2/17**	● Information Literacy in the Digital Age ● Fake News	● Did Media Literacy Backfire? (Data & Society) ● Fake News Is Not the Only Problem (Data & Society) ● The Fallacy of the 'Digital Native': Why Young People Need to Develop their Digital Skills (ECDL) ● How to Spot Fake News (IFLA); Spot Fake News (Common Sense) ● How to Choose Your News (Damon Brown for TED-Ed) ● The CRAAP Test Worksheet (**on ELMS**) ● **DUE by 11:59pm EST on Wed. 2/13**: News Article Presentations #1 ● **DUE by 11:59pm EST on Sun. 2/17**: News Article Responses #1 ● **DUE by 11:59pm EST on Sun. 2/17**: Content Quiz #2
Week 4 **2/18 - 2/24**	● Information Economics	

		● The Hyperconnected Economy: How the growing interconnectedness of society is changing the landscape for business (The Economist) ● The Long Tail (Wired) ● Information economics and the Internet by Coeira (**on ELMS)** ● **DUE by 11:59pm EST on Wed. 2/20**: News Article Presentations #2 ● **DUE by 11:59pm EST on Sun. 2/24**: News Article Responses #2 ● **DUE by 11:59pm EST on Sun. 2/24**: Content Quiz #3
Week 5 2/25 - 3/3	● Information Organization ● Information Overload	● Looking for Information by Don Case (**on ELMS**) ● Metadata? Thesauri? Taxonomies? Topic Maps! Making Sense of it all (**on ELMS**) ● Too Many Choices: A Problem That Can Paralyze (NY Times) ● Attached to Technology and Paying a Price (NY Times) ● **DUE by 11:59pm EST on Sun. 3/3**: ILAR #2 ● **DUE by 11:59pm EST on Sun. 3/3**: Content Quiz #4
Week 6 3/4 - 3/10	● Social Media ● Mobile Media	● Social Media Use in 2018 (Pew Internet Project) ● Confirmed: Echo chambers exist on social media. So what do we do about them? (Washington Post) ● Have Smartphones Destroyed a Generation? (The Atlantic) ● A sociology of the smartphone (Longreads) ● Did social media ruin election 2016 (NPR) ● **DUE by 11:59pm EST on Wed. 3/6**: News Article Presentations #3 ● **DUE by 11:59pm EDT on Sun. 3/10**: News Article Responses #3 ● **DUE by 11:59pm EDT on Sun. 3/10**: Content Quiz #5
Week 7 3/11 - 3/17	● Accessibility ● Universal Design	● What is Universal Design? and all the links under New to Universal Design? (NDA) ● Locked Out (Jonathan Lazar) ● **DUE by 11:59pm EDT on Wed. 3/13**: News Article Presentations #4 ● **DUE by 11:59pm EDT on Sun. 3/17**: News Article Responses #4

		● **DUE by 11:59pm EDT on Sun. 3/17**: Content Quiz #6
Week 8 **3/18 - 3/24**	**Spring Break!!!!**	
Week 9 **3/25 - 3/31**	● Memes, Virality, and Breaking the Internet: Content Consumers as Content Creators	● "The Viral Dream" Chapter in Terms of Service (**on ELMS**) ● Ice Bucket Challenge Funds ALS Breakthrough, Proves Skeptics Wrong ([Forbes](#)) ● Yes, Those Ice Buckets Raised Millions, But There Was No ALS 'Breakthrough' ([Forbes](#)) ● How 'Pepe the Frog' went from harmless to hate symbol ([LA Times](#)) ● Why that video went viral ([New York Times](#)) ● **DUE by 11:59pm EST on Sun. 3/31**: ILAR #3 ● **DUE by 11:59pm EST on Sun. 3/31**: Content Quiz #7 ● **DUE by 11:59pm EST on Sun. 3/31**: Meme & Virality Project Ideas
Week 10 **4/1 - 4/7**	● Online Communities ● Online Harassment ● VR/AR	● Ch. 4 Baym's Personal Connections in the Digital Age (**on ELMS**) ● Vitak et al. (2017): Identifying Women's Experiences With and Strategies for Mitigating Negative Effects of Online Harassment (**on ELMS**) ● The Rise and Fall of Virtual Reality ([The Verge](#)) ● Why 'Pokémon GO' Is The World's Most Important Game ([Forbes](#)) ● Fighting online trolls with bots ([The Conversation](#)) ● **DUE by 11:59pm EDT on Wed. 4/3**: News Article Presentations #5 ● **DUE by 11:59pm EDT on Sun. 4/7**: News Article Responses #5 ● **DUE by 11:59pm EDT on Sun. 4/7**: Content Quiz #8
Week 11 **4/8 - 4/14**	● Privacy ● Security ● Surveillance ● Doxxing	● Google's Cerf Says "Privacy May Be An Anomaly." Historically, He's Right ([TechCrunch](#)) ● Securing Your Digital Life Like a Normal Person ([Medium](#)) ● Maybe Better If You Don't Read This Story on Public WiFi ([Medium](#)) ● The Internet of Things: Roadmap to a Connected World ([MIT Technology Review](#))

		● The $11 Trillion Internet Of Things, Big Data And Pattern Of Life Analytics ([Forbes](#)) ● Jennifer Golbeck: Your social media "likes" expose more than you think ([TED talk](#)) ● There's No Such Thing as Innocuous Personal Data ([Slate](#)) ● Cambridge Analytica is just the tip of the iceberg ([Vanity Fair](#)) ● So What the Hell Is Doxxing? ([ProPublica](#)) ● **DUE by 11:59pm EDT on Wed. 4/10**: News Article Presentations #6 ● **DUE by 11:59pm EDT on Sun. 4/14**: News Article Responses #6 ● **DUE by 11:59pm EDT on Sun. 4/14**: Content Quiz #9
Week 12 **4/15 - 4/21**		● Work on Meme & Virality Project ● **DUE by 11:59pm EDT on Sun. 4/21**: Meme & Virality Project Peer Feedback
Week 13 **4/22 - 4/28**	● Big Data ● Algorithms ● Ethics	● Crash Course Computer Science: Machine learning & artificial intelligence ([YouTube](#)) ● Computers tell us who to date, who to jail: But should they? ([National Geographic](#)) ● Do Algorithms Perpetuate Human Bias? ([NPR/TED](#)) ● The Humans Working Behind the AI Curtain ([Harvard Business Review](#)) ● Tech's Ethical 'Dark Side': Harvard, Stanford, and Others Want to Address It ([NY Times](#)) ● The Real Name Fallacy ([Coral Project](#)) ● Perspectives on Big Data, Ethics, and Society (**on ELMS**) ● **DUE by 11:59pm EDT on Wed. 4/24**: News Article Presentations #7 ● **DUE by 11:59pm EDT on Sun. 4/28**: News Article Responses #7 ● **DUE by 11:59pm EDT on Sun. 4/28**: Content Quiz #10
Week 14 **4/29 - 5/5**	● ICTs for Activism, Political and Social Change	● Malcom Gladwell, "Why the Revolution Will Not Be Tweeted" (**on ELMS**) ● Taking power through technology in the Arab Spring (Al Jazeera) ● Activism in the Social Media Age ([Pew](#))

		• Beyond the Hashtags report on #BLM: read intro and conclusion (**on ELMS**) • A Hard Look At The Hard Numbers Of #MeToo ([Forbes](#)) • **DUE by 11:59pm EDT on Wed. 5/1**: News Article Presentations #8 • **DUE by 11:59pm EDT on Wed. 5/5**: News Article Responses #8
Week 15 **5/6 - 5/12**		• **DUE by 11:59pm EDT on Sun. 5/12**: Meme & Virality Project
Final		• **DUE by 11:59pm EDT on Fri. 5/17**: Final Reflection

Note: This is a tentative schedule, and subject to change as necessary – monitor the course ELMS page for current deadlines. In the unlikely event of a prolonged university closing, or an extended absence from the university, adjustments to the course schedule, deadlines, and assignments will be made based on the duration of the closing and the specific dates missed.