INST 201—Introduction to Information Science

Fall 2019

Instructor Information

Instructor	Email	Office Location & Hours
Lee Lipscomb	llipsco1@umd.edu	Patuxent 2112, Hornbake 4120K By appointment only
Salma Elsayed-Ali (TA)	sea@umd.edu	By appointment only

Office Information

Who and how to contact with questions	All questions & comments should be sent to llipsco1@umd.edu. Include INST201 in your email subject line. Questions about assignments should cc Salma sea@umd.edu.
Class Time	M 10:00 am-10:50 am & online (Asynchronous) Blended Learning
Class Location	SQH 1120 campus map

General Information

CATALOG DESCRIPTION

Examining effects of new information technologies on how we conduct business, interact with friends, and go through our daily lives. Understanding how technical and social factors have influenced evolution of information society. Evaluating the transformative power of information in education, policy, and entertainment—and the dark side of these changes.

COURSE DESCRIPTION

We live in an increasingly networked information society, characterized by a complex relationship between information & communication technologies (ICT) and the people who use them. While most individuals, organizations, and governments are quick to adopt new technologies, they rarely take the time to consider how that technology is shaping their behaviors and, conversely, how users shape the development of future technologies.

This course will provide you with the foundational knowledge needed to begin addressing key issues associated with the rise of the Information 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?).

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. 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.

STUDENT LEARNING OUTCOMES

At the conclusion of this class, you should 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 CLASS MATERIALS

There is no textbook for this course. Course readings are located on ELMS. Course readings are subject to change, so make sure you check ELMS for any updates before you dig into a given week's readings. I will also sometimes assign videos to watch for class; these will all be publicly available through sites like YouTube and links will be posted on ELMS.

Before the second week of class, you will need to create a Turning Account and purchase/register your clicker. For step-by-step instructions, see https://www.clickers.umd.edu/students/getting-start-ed-students. Clickers will be used for in-class quizzes and activities, which constitute 20% of your grade.

CLASS STRUCTURE

This course involves lectures, in-class activities, engagement with current events, and a group 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 before class (see syllabus and ELMS for reading assignments). 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.

While attendance is not taken in this class, there will be 12 random quizzes or graded in- class activities throughout the semester. Participation in these activities will be captured through your Clickers, so make sure you have purchased one by the start of the semester and bring it to every class meeting. I will drop the lowest two grades from these activities
at the end of the semester. **Note that any student caught using a classmate's clicker (and the owner of that clicker) will receive a zero for the semester's clicker activities.**

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 in class, please sit in one of the last three rows. This is the only section of the classroom where laptops are allowed, except on any occasions when we do an in-class activity requiring Internet access.

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.

COURSE ACTIVITIES AND GRADING

Your final grade will be based on the following components, which are detailed below:

A Day Without Technology writing assignment (10%)

Quizzes/In-class activities (20%; multiple dates)

Discussion Leaders/Discussion Forums (20%; multiple dates)

Group project (20%; multiple dates)

Midterm (15%)

Final (15%)

A Day Without Technology (10%; DUE 9/27): Growing up in the 21st century, it may be difficult for you to remember a time before the Internet, smartphones, and social media. In

reality, the evolution of communication technologies has happened at a breakneck pace, and you are the first "always on" generation.

This assignment allows some self-reflection on the role communication technologies play in your day-to-day life. As part of this assignment, you will first complete a survey on ELMS to measure your perceptions of your media use. Then, at some point during a pre-specified one-week timeframe, you should refrain from accessing **any** communication-based technologies (including, but not limited to: computers, tablets, mobile phones, and gaming devices) for **24 hours**. The one exception is if you need to use a computer for an assignment; otherwise, try to select a day where you don't have technology-related conflicts (e.g., going to the movies, a gaming tournament, etc.)

Following your "technology sabbatical," write a 400-600 word blog post about the experience. Were you able to make it the full 24 hours without "cheating"? How has this activity made you think about your technology use? Which devices were the hardest to live without? Do you think you could do this for a week? For a month?

Quizzes/In-class activities (20%; multiple dates): Throughout the semester, we will have in-class quizzes or activities to reinforce course content. These quizzes/activities **will not** be announced beforehand. Quizzes will typically be 3-4 questions related to that week's topic and will require use of your Clicker. These will begin promptly at the start of class; students arriving late may not be able to complete the quiz. Activities may require the Clicker or turning in a sheet at the end of that class session with your name. The only way to receive credit for these is to be present during class.

Note: The lowest two grades for the semester will be dropped.

Discussion Leaders (20%; multiple dates): During the first week of class, each of you will be randomly assigned into discussion groups in ELMS. Every other week, one person in the group will be assigned as their group's discussion leader. The discussion leader must post a short commentary (200-300 words) on that week's topic and prompt the group with at least two discussion questions. Everyone else in the group is expected to (1) respond to the discussion leader's post and (2) respond to another group member's comment (100 words minimum for each post). The discussion leader is also expected to engage with the responses. The purpose of these posts is to **facilitate discussion** within your group.

• **Each student is required to participate in at least 4 of the 7 discussions in addition to their week as discussion leader** to receive full credit on this component. If a student completes more than five total (1 leader, 4 participant) discussions, I will only keep the highest grades.

• For the week they're assigned, discussion leaders must post their commentary/questions by that Monday at midnight. The discussion that follows within the group must be posted by Friday at mid-

night.

- Discussion forums will be open for Weeks 3, 5, 6, 7, 10, 12, and 14.

- **Grade breakdown:**
  o Discussion leader week: 8%
  o Discussion participation (four times): 3% each/12% total.

Group project (20%; multiple dates): 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 be assigned to teams of 5 people. The goal of this assignment is to create a piece of content (a blog post, Facebook post, YouTube video, meme, Tumblr page, Buzzfeed list, etc.) 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.

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.

Each team will need to submit a brief (~1 page) description of their proposed idea and get approval. You may change your idea after this time but if it is a significant change, you should run it by me. You will spend a significant part of the semester developing and designing their content. Content can be highly technical or require no technical skills; it's completely up to the group to decide on the form the content takes.

All groups will launch their content on the same day and will have up to three weeks to collect as many views/hits/etc. as possible. We will have an in-class debriefing on the project (December 2) to talk about what worked and what didn't and to have a general discussion about implications of virality on what we see online—and what we don't. Each team will need to submit a final report on the last day of class (December 9).

Note: The team with the "best" campaign (as voted on by the full class) will receive a 2-point bonus to their final grade and the team with the second-best campaign will receive a 1-point bonus. In addition, the team with the most viral content (measured by hits) will receive a 2-point bonus on their final grade.

Deliverables for this project:
1. Due 9/30 (ELMS upload; 5% of grade): Each group must upload a 1-page project description. This should include the team name, two ideas for the project (including a justification for why they think each idea will be successful), and an overview of their strategy for obtaining maximum exposure. I will provide feedback on each proposal.

2. Due 11/4 (ELMS upload; penalty for late submissions): Each group must be ready to launch their content. They must upload an active link to the content to be shared. Content can go live after class on 11/4 – but not before.

3. Due 11/25 (ELMS upload; 5% of grade): We'll use the 12/2 class to debrief the project and share group findings. Each group must upload a 1-slide PPT with primary data from their project: what they did (screenshot of content), how they disseminated it, and statistics on content spread. The slides are due the day before class (12/1 at noon) so I can download and organize them before class.

4. Due 12/9 (ELMS upload; 10% of grade): Each group must submit a 1200-1500 word reflection paper on the project electronically by the start of class. This should include a discussion of what the group did well, what they would change, and a critical reflection on the broader implications of how information spreads online. The paper should incorporate content covered throughout the semester and

should reflect mastery of topics related to information seeking and information dissemination, as well as how specific features and affordances of the Web have changed content creation and consumption.

Midterm and Final (15% each; 30% of total grade): Two exams during the semester will be used to evaluate students' comprehension of key concepts. These tests may include multiple choice items and/or short-answer essays. The midterm will include content covered from Weeks 1-7. The final will be cumulative, including questions from the full semester. The class session before each test will be used for review of concepts of student questions.

GRADE EVALUATION

Missed Deadlines: If 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. Note that for the discussion forums and in-class activities, I will drop the two lowest grades to allow account for missed classes or missed deadlines due to extenuating circumstances.

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 Health Center's policy on medical excuse notes) 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.

Late Assignments Policy: A 10% penalty will be deducted for each day or part of a day that an assignment is late (starting one minute beyond the due date time). Please prepare in advance so that you will not encounter technical difficulties that will result in your work receiving a late 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.

Note: Exams are not included in the late policy. See above.

Grading: The primary purpose of the grades is to provide an accurate assessment of how well you know the concepts, techniques, and tools that are the focus of the class. Each assignment will be graded based on a rubric available to you and will be based on mastery of concepts. If you believe that a grade you received does not accurately reflect your knowledge and ability (either due to a grading error or a trivial misunderstanding on your part), you may raise the issue within one week of receiving the grade by either (a) sending me and the TA an e-mail or (b) speaking with me or the TA after class. After considering the issue, I will adjust your grade (either up or down) to best reflect your knowledge of the material.

Final Grades: Final grades will be submitted 48-72 hours after the final exam. **NOTE:** I do not round grades up, so do not ask me to do this at the end of the semester. The cutoffs are as follows:

A+ 97-100 pts.	B+ 87-89.9	C+ 77-79.9	D+ 67-69.9
A 93-96.9	B 83-86.9	C 73-76.9	D 63-66.9
A- 90-92.9	B- 80-82.9	C- 70-72.9	F less than 60

In this class, an "A" denotes full achievement of the goals of the class, a "B" denotes good progress towards the learning objectives, and a "C" indicates that you were able to comprehend the concepts involved but were unable to effectively apply that knowledge. Since the grading is based on a point-based system, an F is not the same thing as a zero. Failing work still earns some points. **You are always better off to turn something in and get feedback on what you were able to complete.** The point-based system also means that you can keep track of your progress and always know what your current grade is in the course. You are encouraged to monitor your own performance.

POLICY ON ACADEMIC MISCONDUCT

Cases of academic misconduct will be referred to the Office of Student Conduct irrespective of scope and circumstances, as required by university rules and regulations. It is crucial to understand that the

instructors do not have a choice of following other courses of actions in handling these cases. There are severe consequences of academic misconduct, some of which are permanent and reflected on the student's transcript. For details about procedures governing such referrals and possible consequences for the student please visit http://osc.umd.edu/OSC/Default.aspx

It is very important that you complete your own assignments, and do not share any files or other work. The best course of action to take when a student is having problems with an assignment question is to contact the instructor. The instructor will be happy to work with students while they work on the assignments.

University of Maryland Code of Academic Integrity

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit http://shc.umd.edu/SHC/Default.aspx

Students have a responsibility to familiarize themselves with violations of the Code of Academic Integrity. Among these include:

1. Cheating

"Intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise."

2. Fabrication
"Intentional and unauthorized falsification or invention of any information or citation in an academic exercise."

3. Facilitating Academic Dishonesty

"Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty."

4. Plagiarism
"Intentionally or knowingly representing the words or ideas of another as one's own in an academic exercise."

SPECIAL NEEDS

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.

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

TIPS FOR A SUCCESSFUL SEMESTER

1. Come to class prepared. This includes completing any assignments and readings before class.

2. 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.

3. Engage in class discussions. Ask questions. Share your opinions. Be open to others' viewpoints, even if they're different than your own.

4. Have a question outside of class? Email me anytime. Make sure to include the course number (IN-ST201) in the subject line to ensure I see it. I will respond within 48 hours. Do not email me multiple times if I have not responded and less than 48 hours have passed. After that time, please send me a reminder email.

5. Visit me during my office hours to talk about course content or anything else on your mind.

6. Know your rights as an undergraduate student at UMD: University of Maryland Policies for Undergraduate Students

7. Have fun!

ONLINE WRITING CENTERS

Below, I have included information on three preeminent online writing centers.

HARVARD UNIVERSITY
Cambridge, Massachusetts

http://www.fas.harvard.edu/~wricntr/

PURDUE UNIVERSITY
West Lafayette, Indiana

http://owl.english.purdue.edu/

RENSSELAER POLYTECHNIC INSTITUTE
Troy, New York

http://www.ccp.rpi.edu

World Wide Web (www) Access to the University of Maryland
University of Maryland General Information: http://www.umd.edu/

University of Maryland Testudo: http://www.testudo.umd.edu/

University of Maryland Libraries: http://www.lib.umd.edu/

University of Maryland SEATS: http://www.sis.umd.edu/bin/seats

Recording of Class Lectures
All rights reserved. No part of any lecture may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording or any information storage and retrieval system, without permission in writing from the professor.

Cell/Mobile Phones and Electronic Devices
Please turn off cell phones and other electronic devices during class.

Letters of Recommendation
One of my most important responsibilities is to write excellent letters of recommendations in which I fully support colleagues and students in their professional endeavors. To write an effective letter, I need a copy of your current resume; and the full name, professional title, department or unit (with a room number, if available), street address, city, state, and zip code of the person to whom I am sending your recommendation. Also, if you are required to provide me with an evaluation form to accompany the letter, make sure that you complete (type) all of the required information on the form before you give it to me.

I do not write open letters of recommendation (refer to the Buckley Amendment). That is, I do not write public letters for inclusion in professional portfolios, websites, or other published venues. I am always willing to provide you with a copy of the letter that I write for you, but the content of that letter is between you and me.

Week	Topic	Reading	Assignment
Week 1 **8/26**	What is information and why should we study it?	**REQUIRED** Lester & Koehler, Chapter 2 (on ELMS) **RECOMMENDED** Video: Defining the Information Age (1982)	
Week 2 **9/2** **No in-class session** **LABOR DAY**	From the printing press to the Web: Historical Roots of ICTs	**REQUIRED** Pew's Three Technology Revolutions The Virtual Community, Chapter 3 (Howard Rheingold, available online) The Computer as a Communication Device (Licklider, on ELMS) **RECOMMENDED** Pew: 15 percent of Americans don't use the Internet (video) Brief History of Computers That Changed the World The Control Revolution (Infographic) History Channel: The Invention of the Internet (documentary) Second Thumbnail from the left Chapter 12 (The Legacy of the Telegraph) in The Victorian Internet by Standage (on ELMS)	Purchase and register clickers by the start of Week 2
Week 3 **9/9**	Understanding how the Internet & Web emerged	**REQUIRED** Isaacson, "The Innovators" chapters 7 & 11 (on ELMS) Terry Gross interview with Andrew Blum (audio)	Discussion Forum #1
Week 4 **9/16**	How the Information Age is changing humans for the better—or is it?	**REQUIRED** Sherry Turkle, Stop Googling. Let's Talk (NY Times) Note to Self Podcast: The Case for Infomagical (audio) The media and the literacies: media literacy, information literacy, digital (on ELMS) **RECOMMENDED** Clay Shirky's TED Talk (video)	
Week 5 **9/23**	Information Economics	**REQUIRED** 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)	Discussion Forum #2 Day without technology

Week	Topic	Reading	Assignment
Week 6 9/30	Information, needs, information seeking & sharing; information overload	**REQUIRED** Information-Seeking Behavior in Generation Y Students: Motivation, Critical Thinking, and Learning Theory (on ELMS) Chapter 3 in Fundamentals of Information Studies (on ELMS) Too Many Choices: A Problem That Can Paralyze (NY Times) **RECOMMENDED** Psychological and economic implications of purchasing information. Information Abundance (Chronicle)	Discussion Forum #3 1-page project description due Monday
Week 7 10/7	Memes, Virality, and Breaking the Internet: Content Consumers as Content Creators	**REQUIRED** "Viral Dreams" Chapter in Terms of Service (on ELMS) Chapter 11 in The Information by Gleick (on ELMS) Why 'viral mills' like Buzzfeed & Upworthy are content marketing at its worst (VentureBeat) Why that video went viral (New York Times) **RECOMMENDED** What makes online content viral? (on ELMS) What makes a video go viral? An analysis of emotional contagion and Internet memes (on ELMS)	Discussion Forum #4
Week 8 10/14		**MIDTERM** (review Monday and Wednesday, exam Friday)	
Week 9 10/21	Online Communities & Social Networks	**REQUIRED** Chapter 4 in Baym's Personal Connections in the Digital Age (on ELMS) Confirmed: Echo chambers exist on social media. So what do we do about them? (Washington Post) Understanding the Implications of a Global Village (Inquiries Journal) **RECOMMENDED** Marshall McLuhan - The World is a Global Village (CBC TV-- YouTube)	

Week	Topic	Reading	Assignment
Week 10 **10/28**	The Quanti-Fied Self (Monday) Algorithms & Artificial Intelligence	**REQUIRED** Wilson (2012): You, by the Numbers. Harvard Business Review (on ELMS). There's No Such Thing as Innocuous Personal Data ([Slate](#)) Police in North Carolina are using an algorithm to prevent police brutality ([Business Insider](#)) When Algorithms Discriminate ([New York Times](#)) **RECOMMENDED** Best Practices for Consumer Wearables & Wellness Apps & Devices—Future of Privacy Forum ([PDF](#)) Why Won't Facebook Release Me From Overnight Oats Hell? ([Buzzfeed](#)) The Moral Bias Behind Your Search Results ([TED Talk](#)) Is Wikipedia Foreshadowing Clinton's Vice-Presidential Pick? ([The Atlantic](#))	Discussion Forum #5
Week 11 **11/4**	Evolving Educational Practices: Is more technology in the classroom better?	**REQUIRED** Online Classes Fuel a Campus Debate ([New York Times](#)) **RECOMMENDED** Can Technology Change Education? Yes! Raj Dhingra at TEDxBend ([video](#))	Groups ready to launch content (submit link by Monday)
Week 12 **11/11**	Privacy & Security in the Information Age	**REQUIRED** 2018 Privacy Year in Review ([Winston & Strawn](#)) The Most Wanted Man in the World ([WIRED](#)) **RECOMMENDED** Watch the Full Episode: 'State of Surveillance' with Edward Snowden and Shane Smith ([VICE](#)) The state of cyber security: we're all screwed ([The Guardian](#))	Discussion Forum #6
Week 13 **11/18**	Will the revolution be tweeted? ICTs & democratization, power, and authority around the world	**REQUIRED** How the NSA Spying Programs Have Changed Since Snowden ([PBS Frontline](#)) Malcom Gladwell, "Why the Revolution Will Not Be Tweeted" ([The New Yorker](#))	

Week	Topic	Reading	Assignment
Week 14 **11/25**	Group Project Debrief (Monday) The Rise of Mobile Technologies & Living in a Hyperconnected World (Wednesday)	**REQUIRED** How Target Figured Out A Teen Girl Was Pregnant Before Her Father Did ([Forbes](#)) How One Woman Hid Her Pregnancy From Big Data-watch from 0:00-15:15 run time ([video](#)) Chapter 10 from Naomi Baron's "Always On" (on ELMS)	Discussion Forum #7
Week 15 **12/2**	What's the Future of Information for Our Lives, Our Jobs & Society? (Monday)	**REQUIRED** Chapter 11 in Networked by Rainie & Wellman (on ELMS) The 24 ways we're tracked on a regular basis reveal something disturbing about the future ([Tech Insider](#))	PPT slides and 2-minute debrief presentation
Week 16 **12/9**	Final Exam Review (Monday, Wednesday, Friday)		Group reflection paper
12/16		Final Exam – Monday, December 16	
		This schedule is for planning purposes and may change. **See ELMS for current information and deadlines.**	

Assignment & Exam Schedule

Date	Subject
9/2 No in-class session LABOR DAY	Purchase and register clickers
9/9	Discussion Forum #1
9/23	Discussion Forum #2 & Day without technology
9/30	Discussion Forum #3 & 1-page project description due Monday
10/7	Discussion Forum #4
10/18	MIDTERM
10/28	Discussion Forum #5
11/4	Groups ready to launch content (submit link by Monday)
11/11	Discussion Forum #6
11/25	Discussion Forum #7
12/2	PPT slides and 2-minute debrief presentation
12/9	Group reflection paper
12/16	FINAL EXAM