

New York University  
Department of Media, Culture, and Communication  
**MCC-UE 1031 Digital Literacy**

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239 Greene Street, 309  
Classroom Location TBD

Office hours: By Appointment  
212-998-7322  
Class meeting times TBD

### **Course Description**

This course offers students a foundational understanding of the technological building blocks that make up digital media and culture, and of the ways they come together to shape myriad facets of life. Students will acquire a working knowledge of the key concepts behind coding, and survey the contours of digital media architecture, familiarizing themselves with algorithms, databases, hardware, and similar key components. These technological frameworks will be examined as the basic grammar of digital media and related to theories of identity, privacy, policy, and other pertinent themes.

### **Course Background**

Humanity, equipped with smartphones, YouTube, Facebook, and other platforms of communication, has begun an unprecedented upheaval. We are moving from a world of spectators to a world of players. The big story is not in our gadgetry but in ourselves: The new, ever-connected technologies feed, and also respond to, a worldwide desire to participate. Vast numbers of people want to make their marks on the world, from the rambunctious Australian runaway who went from juvenile hacking to devising Wikileaks to the hoaxers who pretend to be a well-known politician or spread the rumor that Harrison Ford had drowned. Regardless of their intent, these players are all bound by a fluency in the new language of digital media. To understand and master the foundations of this new literacy, this class will focus on the concrete elements that make up its grammar, including code and algorithms, databases and their applications, hardware and network architecture, protocols, and the other technologies that make the Internet, quite literally, work. In addition, it will survey an array of pertinent policy and legislation considerations, as well as address larger philosophical questions raised by life online.

### **Learning Outcomes**

Students will:

- Identify the historical development of information technologies in general and digital media in particular, analyzing their technological, social, and political evolutions.
- Explain key concepts of network infrastructure, including algorithms, architecture, databases etc. through written and verbal communication.

- Analyze readings on pertinent policy and legislation concerns pertaining to digital communications.
- Critique various theoretical perspectives on digital media and its central themes through class discussion.

### **Required Texts**

- Blum, Andrew. *Tubes: A Journey to the Center of the Internet*. New York : Ecco, 2012. Print.
- Wu, Tim. *The Master Switch: The Rise and Fall of Information Empires*. New York : Alfred A. Knopf, 2010. Print.
- Carr, Nicholas G.. *The Shallows: What The Internet is Doing to Our Brains*. New York : W.W. Norton, 2010. Print.

*All other texts will be provided in class or via Blackboard.*

### **Assignments & Evaluation**

*Attendance and Participation: 15 Percent*

*Class Presentation: 10 Percent*

*3 Short Papers: 35 Percent*

\*More guidance on the expectations for the short papers will be distributed in class

*Final Paper—Individual Research Project: 40 Percent*

Each student must submit a 10-15-page-long research paper pertaining to a topic relevant to the material covered in class. I'll discuss the final project, and provide additional guidelines, as the semester progresses. Each paper topic must be presented in a one-page research proposal and approved by me; further instructions, deadlines, etc. will be delivered during the semester.

### **Evaluation Rubrics**

A= Excellent

This work is comprehensive and detailed, integrating themes and concepts from discussions, lectures and readings. Writing is clear, analytical and organized. Arguments offer specific examples and concisely evaluate evidence. Students who earn this grade are prepared for class, synthesize course materials and contribute insightfully.

B=Good

This work is complete and accurate, offering insights at general level of understanding. Writing is clear, uses examples properly and tends toward broad analysis. Classroom participation is consistent and thoughtful.

C=Average

This work is correct but is largely descriptive, lacking analysis. Writing is vague and at times tangential. Arguments are unorganized, without specific examples or analysis. Classroom participation is inarticulate.

D= Unsatisfactory

This work is incomplete, and evidences little understanding of the readings or discussions. Arguments demonstrate inattention to detail, misunderstand course material and overlook significant themes. Classroom participation is spotty, unprepared and off topic.

F=Failed

This grade indicates a failure to participate and/or incomplete assignments

A = 94-100

A- = 90-93

B+ = 87-89

B = 84-86

B- = 80-83

C+ = 77-79

C = 74-76

C- = 70-73

D+ = 65-69

D = 60-64

F = 0-59

## **Course Policies**

### **Absences and Lateness**

More than two unexcused absences will automatically result in a lower grade. Chronic lateness will also be reflected in your evaluation of participation. Regardless of the reason for your absence you will be responsible for any missed work. Travel arrangements do not constitute a valid excuse for rescheduling exams. There are no extra credit assignments for this class.

### **Format**

Please type and double-space your written work. Typing improves the clarity and readability of your work and double-spacing allows room for me to comment. Please also number and staple multiple pages. You are free to use your preferred citation style. Please use it consistently throughout your writing. If sending a document electronically, please name the file in the following format Yourlastname Coursenumber Assignment1.doc

### **Grade Appeals**

Please allow two days to pass before you submit a grade appeal. This gives you time to reflect on my assessment. If you still want to appeal your grade, please submit a

short but considered paragraph detailing your concerns. Based on this paragraph I will review the question and either augment your grade or refine my explanation for the lost points.

### **General Decorum**

Slipping in late or leaving early, sleeping, text messaging, surfing the Internet, doing homework in class, eating, etc. are distracting and disrespectful to all participants in the course.

### **Academic Dishonesty and Plagiarism**

[http://steinhardt.nyu.edu/policies/academic\\_integrity](http://steinhardt.nyu.edu/policies/academic_integrity)

The relationship between students and faculty is the keystone of the educational experience at New York University in the Steinhardt School of Culture, Education, and Human Development. This relationship takes an honor code for granted and mutual trust, respect, and responsibility as foundational requirements. Thus, how you learn is as important as what you learn. A university education aims not only to produce high-quality scholars, but to also cultivate honorable citizens.

Academic integrity is the guiding principle for all that you do, from taking exams to making oral presentations to writing term papers. It requires that you recognize and acknowledge information derived from others and take credit only for ideas and work that are yours.

You violate the principle of academic integrity when you

- cheat on an exam,
- submit the same work for two different courses without prior permission from your professors,
- receive help on a takehome examination that calls for independent work, or
- plagiarize.

Plagiarism, one of the gravest forms of academic dishonesty in university life, whether intended or not, is academic fraud. In a community of scholars, whose members are teaching, learning, and discovering knowledge, plagiarism cannot be tolerated.

Plagiarism is failure to properly assign authorship to a paper, a document, an oral presentation, a musical score, and/or other materials that are not your original work. You plagiarize when, without proper attribution, you do any of the following:

- copy verbatim from a book, an article, or other media;
- download documents from the Internet;
- purchase documents;
- report from other's oral work;
- paraphrase or restate someone else's facts, analysis, and/or conclusions; or
- copy directly from a classmate or allow a classmate to copy from you.

Your professors are responsible for helping you to understand other people's ideas, to use resources and conscientiously acknowledge them, and to develop and clarify your own thinking. You should know what constitutes good and honest scholarship, style guide preferences, and formats for assignments for each of your courses. Consult your professors for help with problems related to fulfilling course assignments, including questions related to attribution of sources. Through reading, writing, and discussion, you will undoubtedly acquire ideas from others, and exchange ideas and opinions with others, including your classmates and professors. You will be expected, and often required, to build your own work on that of other people. In so doing, you are expected to credit those sources that have contributed to the development of your ideas.

### **Student Resources**

- Students with physical or learning disabilities are required to register with the [Moses Center for Students with Disabilities](#), 726 Broadway, 2nd Floor, (212-998-4980) and are required to present a letter from the Center to the instructor at the start of the semester in order to be considered for appropriate accommodation.
- Writing Center: 411 Lafayette, 3<sup>rd</sup> Floor. Schedule an appointment online at [www.rich15.com/nyu/](http://www.rich15.com/nyu/) or just walk-in.

### **Weekly Schedule**

#### **Week 1: Introduction**

#### **Week 2: From Tumtums to Twitter: A Brief History of Information Technology**

Read:

- Vannevar Bush, "As We May Think," *The Atlantic Monthly*, July 1945.
- James Gleick, "Prologue," "Drums That Talk," in *The Information: A History, A Theory, A Flood*.
- Martin David, "Leibniz's Dream," in *The Universal Computer: The Road from Leibniz to Turing*

#### **Week 3: Pipe Dreams: The Physical Architecture of the Internet**

Read:

- Andrew Blum, *Tubes: A Journey to the Center of the Internet*.

#### **Week 4: Speaking in Code: The Basic Grammar of Algorithms**

Read:

- Selections from Charles Petzold, *Code: The Hidden Language of Computer Hardware and Software*.

**PAPER 1 DUE**

#### **Week 5: TCP/IP, Or How the Internet Actually Works**

Read:

- Selections from Douglas Comer, *Internetworking with TCP/IP, Volume 1: Principles, Protocols, and Architecture*.

#### **Week 6: Under Control: Ownership, Policy, and Network Neutrality**

Read:

- Tim Wu, *The Master Switch*
- Selections from Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom*.

#### **Week 7: The All-Seeing Internet: Privacy and Technology**

Read:

- Selections from Saul Levmore and Martha C. Nussbaum (eds.), *The Offensive Internet: Privacy, Speech, and Reputation*.

#### **Week 8: Copy That: Piracy, IP, and Legislation**

Read:

- Selections from Adrian Johns *Piracy: The Intellectual Property Wars from Gutenberg to Gates*.

**PAPER 2 DUE**

#### **Week 9: The Torrent: Life in the Age of Digital Access and Excess**

Read:

- Todd Gitlin, *Media Unlimited: How the Torrent of Images and Sounds Overwhelms Our Lives*.

### **Week 10: Fast and Furious: How Speed, Space, and Syntax Make Meaning Online**

Read:

- Selections from Paul Virilio, *Speed and Politics*
- Nicholas Carr, "The Vital Paths," in *The Shallows: What the Internet is Doing to Our Brains*

### **Week 11: More Than a Feeling: The Phenomenology of Digital Life**

Read:

- Michael Taussig, "Physiognomic Aspects of Visual Worlds," in *Mimesis and Alterity*
- David Sudnow, *Pilgrims in the MicroWorld: Eye, Mind, and the Essence of Video Games*

PAPER 3 DUE

### **Week 12: Faking It: On the Discrete Charms of the Unreal**

- Jean Baudrillard, "The Precession of Simulacra" and "Simulacra and Science Fiction," in *Simulacra and Simulacrum*.
- Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*.

### **Week 13: Class Presentations**

**Week 14: Summary, Sagacity, Revelry – FINAL PAPER DUE.**