

<http://tiny.cc/COMM345-S18>

**COMM 345: The Social and Economic Implications of
Information and Communication Technologies**
Section: 20546R, 4 units

Fall 2016 - Tuesday-Thursday 2:00pm-3:20pm – ANN-406

Instructor: François Bar (fbar@usc.edu, ANN-310L)
Office hours: by appointment (Monday, Tuesday and Thursday afternoons)

Course Description and Objectives

Sweeping social and economic change accompanies the deployment and use of Information and Communication Technologies (ICTs.) This seminar provides an opportunity to explore these changes through a combination of theory and practice. Students will apply social science theory to explore the social and economic implications of ICTs. They will also engage in *learning by using* communication technologies, in mindful observation of their own activities, and envisioning future information technology uses.

This seminar invites students to explore these concepts and mechanisms by applying them to the emergence of “smart cities”, with a particular focus on Los Angeles. A central theme running through this seminar is that choices about the deployment of ICTs shape the communicative practices and power of different actors. In turn, they transform the interaction between city and citizens. These choices, however, are not pre-determined by the characteristics of the technologies. Rather, ICTs can be used in multiple ways, for example to reinforce or undermine central control, privacy, market competition, or democracy. In turn, how technologies are used favors certain exploratory paths and shapes their future evolution. We will explore what this means in the urban context.

Assignments:

- 1) **Due Week 4: Self-observation of your communication activities.** Keep a diary of some aspect of your communication activities in relation with the city, for a few days (3 to 5 days, depending on your focus). You may want to keep track of mediated/non-mediated communications, analog/digital, mass/interpersonal, etc. You could build an inventory of the ICTs you used (devices, applications, places, etc.). You may want to consider giving up one or more communication tool during those few days and reflect on the impact.
You are encouraged to use a variety of technologies to do this (e.g. voice messages, tweets, video, pictures, drawings, SMS messages, blog posts, etc.) The ultimate deliverable will be a multimedia object providing documentation of

your communication activities and analysis of the implications of the technologies you used. Think of questions such as the following: How does the technology you use shape your communication activities and your daily practices? Does it influence their content? How do the institutional / economic arrangements matter? This is due in week 4, and you will make a brief class presentation presenting your findings.

- 2) **Due Week 7: Problem analysis.** Analyze one particular aspect of urban life (e.g. transportation, culture & entertainment, education, food, civic participation, etc.). Explore the role of communication technology, describe what is working and what is not, and suggest ways to deploy communication technology to improve the situation.

Here again, you are encouraged to think creatively about presenting your work in a compelling format, and you will make a short class presentation.

- 3) **Group Research Project:** In small groups (3-4), elaborate a prototype “smart city” application that addresses a specific aspect of urban life. You will need to think about the various actors involved in creating, maintaining and using it. You will have to envision its engagement mechanics. You will need to think through the details of its economic sustainability. You are not required to build a working prototype, but rather a concept or “paper prototype” – but do try to remain somewhat realistic in the technology applications you envision. This needs to be thought through in enough detail to allow you to realistically explore the socio-economic issues that would be important to your proposal’s success.

The deliverable for this project will include at a minimum a short “design fiction” video and a pitch document explaining your proposal to potential investors or city leaders. You will present your project to the class during the last week. The final version of your pitch document will be due on Thursday, May 6.

Readings & Participation: Students are expected to read the assigned texts before class and come prepared to discuss them. Students will occasionally be asked to make short presentations on some of the readings and/or to participate in the organization of some of the class sessions.

Required Readings:

- Readings will be made available on-line on BlackBoard, or distributed in class
- Students are also expected to follow news related to the class topic throughout the semester. We will use current events as a jumping-off point for class discussions.

One way to do this is to subscribe to the Benton Foundation Weekly Digest:

<https://www.benton.org/benton-weekly-digest>

Grading:

Self-observation: 20%

Problem analysis: 20%
Group project: 45% (final presentation in class: 25%; pitch document: 20%)
Class participation: 15%

Laptop Policy

All undergraduate and graduate Annenberg majors and minors are required to have a PC or Apple laptop that can be used in Annenberg classes. Please refer to the [Annenberg Digital Lounge \(http://www.annenbergdl.org/\)](http://www.annenbergdl.org/) for more information. To connect to USC's Secure Wireless network, please visit USC's Information Technology Services website.

Do take advantage of the free Adobe Creative Cloud training sessions offered at Annenberg.

Schedule

The schedule and reading assignments **will change** as the course unfolds. Please refer to Blackboard for actual weekly assignments.

Week 1 – Introduction and Overview

Tue	Course introduction
Thu	Smart Cities: An overview

- Townsend, Smart Cities, Introduction (Urbanization and Ubiquity).
<http://www.npr.org/books/titles/200797816/smart-cities-big-data-civic-hackers-and-the-quest-for-a-new-utopia#excerpt>
- Berrone, Pascual; Ricart, Joan Enric (2017), Europe and U.S. Dominate 2017 Ranking of World's "Smartest" Cities, IESE insight, Navarra, Spain.
<http://ieseinsight.com/doc.aspx?id=1932&idioma=2>
- The Economist, Clever cities: The multiplexed metropolis, (Sept 2013)
<http://www.economist.com/news/briefing/21585002-enthusiasts-think-data-services-can-change-cities-century-much-electricity>

Optional:

- Excerpt from Greenberg, Against the Smart City at
<http://urbanomnibus.net/2013/10/against-the-smart-city/>

Pick one social and one economic dimension of smart cities that intrigues you and come prepared to present and discuss it in class (5 minutes)

Week 2 - Infrastructure

Tue From telephone to internet

- Neuman and al. (1999). "The Gordian Knot: Political Gridlock on the Information Super-Highway", Cambridge, MA: MIT Press. Chap 2: "The Nature of Networks" (pp45-84) and Chap 3: "The Network and the State" (pp. 85-112) [on Blackboard]
- Sterling, B. 1993. A Short History of the Internet (http://w2.eff.org/Net_culture/internet_sterling.history.txt)

Thu City Infrastructure

- Townsend Chap 1 "The \$100 Billion Jackpot" and Chap 7 "Reinventing City Hall"
- Google Fiber Fuels Internet Access – and Debate - <http://benton.org/headlines/google-fiber-fuels-internet-access-and-debate>

Week 3 – Commons, Peer Production, hacking

Tue

- Benkler, the wealth of networks. chapters 3 and 4 (http://cyber.law.harvard.edu/wealth_of_networks/Main_Page)
- Watch Rafi Santo's Ignite talk at DML2012: <http://empathetics.org/2012/04/> (5 minutes)
- Kelly K. (2010). Lessons from Amish Hackers (Chap 11). In What Technology Wants. New York: Viking

Thu

- Townsend, Ch. 5 "Tinkering Toward Utopia", Ch. 8 "A Planet of Civic Laboratories"

Week 4 - Wireless and Mobile

Tue The mobile revolution

- Economist Special Report, "[On the same wavelength](http://www.economist.com/node/3084475)", (August 12, 2004) <http://www.economist.com/node/3084475>
- Gregory Staple & Kevin Werbach, "[The End of Spectrum Scarcity: New technologies and regulatory reform will bring a bandwidth bonanza](#)", IEEE Spectrum, March 2004
- Baer et al., (2011) "Comparing Mobile Openness: Case Studies of United States, United Kingdom, France, China, India & Brazil", paper presented at the 2011 Telecommunications Policy Research Conference, Arlington, VA.

Thu

Communication Diary presentations

the Internet: The end-to-end arguments vs. the brave new world", TPRC, 2000.
(http://www.csd.uoc.gr/~hy558/papers/Rethinking_2001.pdf)

Week 12 – Big Data

Week 13 – Privacy

Week 14 – (thanksgiving) No classes this week

Week 15 – final (group) presentations

Thursday, May 3, 2pm Final brief due

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

USC Annenberg School of Communication Policy on Academic Integrity

The following is the USC Annenberg School of Communication’s policy on academic integrity and repeated in the syllabus for every course in the school:

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own. All students are expected to understand and abide by these principles. *Scampus*, the Student Guidebook, (www.usc.edu/scampus or <http://scampus.usc.edu>) contains the University Student Conduct Code (see University Governance, Section 11.00), while the recommended sanctions are located in Appendix A.

All academic integrity violations will be reported to the office of Student Judicial Affairs & Community Standards (SJACS), as per university policy, as well as Communication school administrators.

In addition, it is assumed that the work you submit for this course is work you have produced entirely by yourself, and has not been previously produced by you for submission in another course or Learning Lab, without approval of the instructor.

Support Systems:

Student Counseling Services (SCS) – (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. engemannshc.usc.edu/counseling

National Suicide Prevention Lifeline – 1 (800) 273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. www.suicidepreventionlifeline.org

Relationship and Sexual Violence Prevention Services (RSVP) – (213) 740-4900 – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. engemannshc.usc.edu/rsvp

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: sarc.usc.edu

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. equity.usc.edu

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. studentaffairs.usc.edu/bias-assessment-response-support

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. dsp.usc.edu

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. studentaffairs.usc.edu/ssa

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. diversity.usc.edu

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime.

Provides overall safety to USC community. dps.usc.edu