Course #10:762 352:01
Monday’s, 1:10 to 2:30 PM and online (a hybrid course)
Room: Civic Square Building(CSB) 261
Instructor: Marc Pfeiffer, Office 393 CSB, O.848 932-2830, marc.pfeiffer@rutgers.edu
http://blousteinlocal.rutgers.edu/staff/ (scroll down web page),
Office hours: One hour before and after class (Mondays) and by appointment.
Class website on Sakai

“There can be no gainsaying about the fact that a great revolution is taking place in the world today...That is, a technological revolution with the impact of automation and cybernation...Modern man through scientific genius has been able to dwarf distance. Through our genius we have made this world a neighborhood. And yet we – we have not yet had the ethical commitment to make of it a brotherhood. But somehow, and in some way, we have got to do this.” Martin Luther King, four days before he died in 1968.

This course examines the impact of contemporary technology on people, social structures, economy, and the places where they intersect, aka, cities, and it considers from interdisciplinary, multidisciplinary, and cross-disciplinary approaches and how we (society) evolve in them.

Reality check: there is not enough time to cover this entire field in detail since it effectively covers how technology is affecting society in all its aspects. So, this course should be considered a survey to give students a sense of what is happening that will enable them to apply the understandings in many other areas of life. For example, consider the following, written in 1999:

“As the English urbanist Sir Peter Hall has observed, the difficulty in predicting the impact of the internet on our metropolitan areas can be compared with the difficulty observers faced 80 years ago in predicting the impact of the automobile...Some observers assert that the internet will doom cities to obsolescence as cyberspace communication replaces face-to-face contacts that cities used to provide. Others see big cities reborn as hip environments where the art world and other urban-based centers of creativity meet the new technology of communications” (Robert Fishman “The American Metropolis at Century’s End: Past and Future Influences”).

Like the information, communications and operational technologies (aka, cyber) this course is about, its structure is fluid and changing. The course will include some rudimentary technological material, but it is not a “how to” or technical course. Rather, we explore how the fast-changing technology is changing employment, education, entertainment, politics,
transportation, security and interpersonal communications. While society is changing in scales from the global to the local in response to these new technologies, our focus is on cities and the humans who occupy them.

Your instructor has always kept up with the leading edge of technology (just enough to avoid bleeding) for almost 50 years, so he’s pretty adept at understanding and explaining how this all works. He is here as a guide; for this is your class and you should be prepared to participate and contribute. Pair/group projects are encouraged and you are urged to communicate online outside of class time. All the latest research in education points to the value of peer learning rather than lectures; this course expects you to come to class having studied and researched material before getting there; class time will engage you in it. Because this class is a hybrid, there is more than the normal amount of outside of class work to be done – mostly reading and web research. But, it’s not overwhelming. And no quizzes.

**Learning Objectives**
At the conclusion of this course, the student will better understand:

- Some of the many ways technology is changing lives and a historical perspective of that change
- The challenges to organizations and society presented by those changes
- The impact of technology on social classes, the digital divide and its implications domestically and internationally
- The role technology plays in governance at a national and international scale; how it affects the daily services people have to expect from government
- Government uses and regulation of technology
- The impact of the digital economy and changes it brings to society and government
- Trends in subject areas such as education, medicine, governance, health, the environment, and social relationships
- The challenges that technology and its rate of change present to people and society

**Reading and Assignments**
The scholarly and public literature in this field is growing at a fast rate. Go to Google Scholar and enter a relevant search term (e.g. “Smart Cities”), limit your search to when you entered college and after…and you’ll see plenty of interesting material! That is its own challenge for some material as recent as 2012 is now considered as dated, but valuable as it shows how technology is subject to hyperbolic assessment and analysis.

No textbooks are assigned. But, there will be many readings; some directed by the instructor, some you will find on your own, others by choice. But, there is a wealth of current (and reference) material available on web at no cost or small cost via downloadable material.

As a starting point, take a look at Dr. Anthony Townsend, (RU, 1996), the author of Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia (2013). Anthony graduated in Urban Studies from Rutgers. He went on to a master’s in urban planning from NYU and a PhD in planning from MIT. He is highly respected in the field and an expert on “smart cities”. He has a summary website at [www.anthonymobile.com](http://www.anthonymobile.com). A few minutes exploring his site and links will give you a sense of the scope of our issues.
You are expected to research and read for several hours each week, either from books or online material, including journal articles from Google Scholar.

The following is a breakdown of assignment and course grading (subject to change based on experience):

A. **15% Class Participation**: You are expected to come to class prepared to discuss the course material assigned and supplemental individual researched. Classes will be devoted to discussion and analysis of the subject material. Students will be randomly asked to discuss what they researched on their own and the class will discuss them. Other in-class exercises will be used to explore the material. Residual concerns from the previous week can also be discussed.

For each class, you will be expected to:
1. Complete the advance reading assignment for the week’s class discussion
2. Conduct your own research on the subject and post a finding of interest online.
   That can be an article, posting (in any form of media) based on what’s being covered and then review and comment on someone else’s posting
3. Participate in discussion and in-class exercises

B. **20% Takeaways** (one each for classes 2-14): A “takeaway” is a short – one-two pages (between 400 and 800 words, or a 5-five-minute video) synthesizing what you learned from the unit and describe any unanswered issues or concerns. This exercise will also help you retain the what you learned.

C. **20% Online assignments**: Each week you will participate in an online discussion forum, post or commenting based on the material.

D. **15% Book Review** (due November 6): With another student from the class, select a recently published book related to the class. Read it and discuss it with your reading partner. Each write a short review (1,000 words +/-) and one of you writing a positive review, the other a critical one; though it’s OK to both be praising and critical if you like. **Submit your reviews on Sakai by November 6**. If time permits, volunteers may be asked to summarize the book and discuss your reviews verbally in class.

Some possible books are listed in the Resource Section below, but feel free to explore and suggest another one). **Book choices need to be made by October 2.**

E. **20% Research Paper**: (approx. 2,500 words) on course related subject matter of choice subject to instructor approval – with possible optional extra credit presentation – due by **December 11; subject chosen by October 30.**

The paper may be a review of a subject, analysis of web resource, or viewpoint, etc.
It may be a topic included in the syllabus, or another which could relate to technology and urban society. Impact of video games on society? Building local community online? The disruption of
brick and mortar stores? How to improve citizen trust. Digital employment in 2018 (or
whenever you’ll graduate).

The only requirement is that it has something to do with technology and something to do with
cities or urban society. Check with me for pre-approval of your topic! Write an academic paper,
with correctly cited references. References (at least ten) should include journal articles, books
and can include web articles, blog posts, newspaper articles, government documents, etc.
Supplement Google Scholar searches with other web searches! We’ll be using TurnItIn so do not
plagiarize. If you don’t understand what this means, come and talk with me.

No more than two people can select the same topic. You can co-author a paper but it must be at
least 5,000 words with more references. Unless you indicate otherwise, I will assume you
deserve the same grade as your co-author. This can be completed and posted via Sakai any time
during the semester but must be done by December 1.

F. 10% - Final Takeaway Presentation (in lieu of final exam): this is a 5-minute presentation
or video pulling together what you have learned and what you will do with it or impact on you.
It should include what expectations/changes you project in 5 and 10 years, a bit of “future-
casting.”

Academic Integrity
All students are required to follow the Rutgers regulations concerning academic integrity. See
http://academicintegrity.rutgers.edu/integrity.shtml, All written material shall be submitted
via Sakai and put through TurnItIn.

Attendance/Participation Policy
Students are expected to attend all classes; if you expect to miss one or more classes, please use
the University absence reporting website at https://sims.rutgers.edu/ssra/ to indicate the date and
reason for your absence. An email will automatically be sent to me from this system. Note that if
you miss classes for longer than one week, you should contact a dean of students to help verify
your circumstances. If your absence is for religious observance, you are responsible for making
up the work by the following week.

Preliminary Schedule (subject to change)
Specific course reading and comment assignments will be posted each week on Sakai.

- **September 11** – Overview: Opening discussion: review of the syllabus and talking about
  ourselves. Instructor will pose some questions about our own experiences to get a baseline of
  student experiences, use of technology, and their relationships with cities. A discussion of
  research and information overload will follow.
- **September 18** - Technology overview: Human civilization has seen three major revolutions
  in its history. We had the Agricultural Revolution of the ancient times, the Industrial
  Revolution in the late 18th to early 19th century and finally, the Digital/Tech revolution in
  which we currently live. We will discuss and elaborate.
- **September 25** - What does “cyber” (aka, technology) mean, as related to individuals,
businesses, organizations, and governments.
• October 2 - What’s a city? That’s pretty simple question, but what’s the answer? **Book review choice must be made.**

• October 9 - Managing technology: Consider “The Big Merge” of technology and people; how we manage technology and regulate technology; big data; net neutrality; competition and monopoly; privacy and anonymity vs. open and accountable; access and digital divides.

• October 16 - What’s is a “smart city” and when isn’t it so smart.

• October 23 - City related technologies, Part 1: looking at all things planning and infrastructure, e-government, and the new “digital” economy

• October 30 - City related technologies, Part 2 —: public safety, education, health. **Research paper subject due.**

• November 6 - Impact on social lives: social media, economy of cities and careers, and a potpourri. **Book reviews are due.**

• November 13 - Impact on government and their citizens – Part 1: media, trust, social relationships

• November 20 - Impact on government and their citizens - Part 2: how government affects other sectors, budget and investment, government operations

• November 27 - Specific Challenges: democracy, privacy and anonymity vs open and accountable, economy (disruption/automation/jobs)

• December 4 - The other side of technology in cities – what problems does this create

• December 11 - Catch up and presentation discussion. **Final course paper due today!**

• December 18 – Presentations in lieu of final exam

**Reference Sources**
The volume and depth of scholarly, literate writing, news, spin, self-promotion, opinion, technical information, and uninformed blather that is available to students cannot be measured. We’ll discuss that more in class. But, to assist you in getting started in looking for information outside of scholarly sites, the following sites have good material on the subject matters we are considering. You are also welcome to suggest other ones for your colleagues.

- [www.medium.com](http://www.medium.com)
- [www.pewinternet.org](http://www.pewinternet.org) Pew Research Center: Internet and Technology
- [www.nextgov.com](http://www.nextgov.com)
- [www.govtech.com](http://www.govtech.com)
- [www.metrolabnetwork.org](http://www.metrolabnetwork.org)
- [www.sidewalklabs.com](http://www.sidewalklabs.com) SidewalkLabs, an Alphabet (Google) company
- [www.whatworkscities.org](http://www.whatworkscities.org) Johns Hopkins/ Bloomberg
- [http://datasmart.ash.harvard.edu/](http://datasmart.ash.harvard.edu/) Harvard Ash School Data-Smart City Solutions
- [www.senseable.mit.edu](http://www.senseable.mit.edu) MIT Senseable City Lab
- [http://www.bitsandatoms.net](http://www.bitsandatoms.net) Anthony Townsend
- [www.citylab.com](http://www.citylab.com) Atlantic Magazine
- [www.nextcity.com](http://www.nextcity.com)
Some book/e-book title suggestions for book review (and there are many other possibilities) include:

- **Against the Smart City** (The City is here for you to use), 2013
- **Designing the Urban Future: Smart Cities, Scientific American Editors, Kindle**, 2014 (a bit dated already)
- **Future Cities: 42 Insights and Interviews with Influencers, Startups, Investors** Stefano Tresca, 2015.
- **City 2.0: The Habitat of the Forte and How to Get There** (TED Book Book 31), 2013
- **Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia**, Anthony Townsend, 2013
- **Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked**
- **The Signals are Talking: Why Todays’ Fringe is Tomorrow’s Mainstream**, Amy Webb
- **In the Plex: How Google thinks, Works and Shapes our Lives** (April, 2011), Steven Levy
- **Reclaiming Conversation: The Power of Talk in a Digital Age** (2015) and **Alone Together: Why we expect more from technology and less from each other** (Jan, 2011), Sherry Turkle
- **Cypherpunks: Freedom and the Future of the Internet** 2012, Julian Assange et al
- **The Responsive City: Engaging Communities Through Data-Smart Governance** (2015), S. Goldsmith
- **Smart about Cities: Visualizing the Challenge for 21st Urbanism** (2015), T. Dassen
- **Digital Humanitarians: How Big Data is Changing the Face of Humanitarian Response** (2015), P. Meier
- **The Internet of Things** (2015), S. Greengard
- **The Internet is Not the Answer** (2015), Andrew Keen
- …and many others!

Some podcasts:

- [www.wnyc.org/shows/notetoself](http://www.wnyc.org/shows/notetoself)
- [www.tedcity2.org](http://www.tedcity2.org)