Course description:

This course explores the two concepts of development and digital innovation, and their interconnection:

**Development:** Citizens of the North are usually quick to note that they live in a global communication age, but all too often do not pay enough attention to the fact that over 80% of this world is living in conditions that are quite different from ours: the developing world. Half of the human population lives with less than US$2.50 per day, making that a monthly income of less than US$75 for every second member of our global information society. In this seminar we will start with reviewing the multiple dimensions of development and poverty. We will discuss questions like: What is development? Is poverty merely a matter of economic well-being? Why are there so many poor? What are the driving forces behind development? What is the relation between poverty, development, and globalization? What are the dynamics and interplay between developed and developing societies? What are the current (micro- and macro) approaches to eliminate global poverty? How do entrepreneurs and innovations drive development and reduce poverty? What is and what can the international community do about it (like the global business sector, multinational enterprises, United Nations, World Bank, global NGOs)? And finally: What is the role of information and communication as building blocks for the development of a society?

**Digital innovation:** At the same time, the introduction of digital ICT (Information and Communication Technologies) changes the lives of all people around the globe (directly or indirectly). In less than two decades, 2 out of 5 people worldwide have linked up through the Internet, and 4 out of 5 have connected with mobile telephony. Our generation of scholars has the luck (or responsibility) to live through and shape an era in which information and communication have become the driving force of human progress. ICT are the most powerful and also the most tangible tool to exploit the ensuing opportunities. We will start with reviewing innovation theory, and the theories behind technology and social change. We discuss questions like: What is the nature of technology and how does it evolve? How do ICT already affect the lives of those living in poverty and what role can ICT play in development? How do digital technologies and applications differ between developed and developing countries? What are examples of how innovative entrepreneurs use ICT to reduce poverty? What works, what doesn’t and what are the costs? Where are ICT evolving from here? And finally: What can we do about it?
Class structure: This is a seminar. Formal lectures will review the readings, but the focus is set on open class discussions based on the readings and projects generated by students. During the first 10 weeks we will review the theories and dynamics behind both of the underlying key concepts: development and digital innovation. During the remaining weeks, students select and deepen their understanding of a specific topic that crosscuts both concepts. This might include, but is not limited to: entrepreneurship and ICT; e-education, e-literacy, e-health, e-business and management, e-government, digital and informational poverty, future technologies, micro-credits, poverty reduction strategies, capacity building, gender and women’s rights, domestic violence, freedom of speech, privacy, intellectual property rights, NGOs and global networking, United Nations and global governance, development aid, environmental and disaster management, agenda setting, digital culture, happiness and quality of life, social networking (role of Facebook, Twitter and YouTube), among others.

Course requirements:
In-class participation: Students are expected to make informed contributions to class discussions and activities. This includes contributions to the class discussion based on the reading material. Not all listed readings are mandatory (although you are certainly welcome to read them all). We will prioritize and distribute readings among students, according to interests. For each class, individual students will be tasked with presenting the main ideas in selected readings and highlighting related questions for discussion. Grade percentage: 20%

Class presentation: Students will select one topic in which they give a presentation of the most relevant literature, key concepts, state-of-the-art and current challenges. This can be directly connected to their class project, or not. Grade percentage: 30%

Class project: Students will develop a project on a chosen topic in which they are expected to make a contribution to the general understanding of the ongoing dynamics of ICT and development. This contribution may be based on primary data or secondary literature, but cannot be simply a summary of existing literature. Students will report weekly on the progress of their projects in the second part of the class. A final paper (15-25 pages) based on these results will be due during the week of finals. Grade percentage: 50%

Course material: All required class readings (books or articles) are online. The list of readings for each week is just a starting point. We may decide as a group to prioritize, add or delete material depending on where the class discussions take us.

Laptop Policy

Effective fall 2014, all undergraduate and graduate Annenberg majors and minors will be required to have a PC or Apple laptop that can be used in Annenberg classes. Please refer to the Annenberg Virtual Commons for more information. To connect to USC’s Secure Wireless network, please visit USC’s Information Technology Services website.

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

Policies and Procedures
Plagiarism

Statement on Academic Integrity

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. Please see the *SCampus* ([http://scampus.usc.edu/1300-academic-integrity-review/](http://scampus.usc.edu/1300-academic-integrity-review/)) for the university’s Student Conduct Code.

USC 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](http://www.usc.edu/scampus) or [http://scampus.usc.edu](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.

Additional Policies

- **Attendance:** Regular attendance is required and essential for your success in this course. If for any reason you are unable to attend class, you must inform the instructor in advance and provide supporting documents to be excused. Frequent absences without legitimate excuses will negatively affect your grade.
- **Checking USC e-mail:** class-related e-mails will be sent to your USC e-mail address. Please check it regularly and make sure your account is not over quota.
- **Use of technology in the classroom:** You are welcome to use your laptop, tablet, or cell phone in class, but only in connection with class-related discussions. Use common sense, and make sure your device use doesn’t distract you or your classmates from class participation.

C. Statement for Students with Disabilities
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. Website and contact information for DSP: http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html, (213) 740-0776 (Phone), (213) 740-6948 (TDD only), (213) 740-8216 (FAX) ability@usc.edu.

Stress Management
Students are under a lot of pressure. If you start to feel overwhelmed, it is important that you reach out for help. A good place to start is the USC Student Counseling Services office at 213-740-7711. The service is confidential, and there is no charge.

Sexual Assault Resource Center
The Center for Women & Men and the Sexual Assault Resource Center are one and the same. Student Counseling Services is a separate place that also offers confidential counseling and support groups on a variety of other topics. To schedule an appointment with Student Counseling Services, call (213) 740-7711 between 8:30 a.m. and 5 p.m. weekdays or visit the Engemann Student Health Center on the University Park Campus.

Emergency Preparedness/Course Continuity in a Crisis
In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies.

1. Introduction to the class & to ICT for Development: a dynamic interplay between technology, society and policy
Overview of the syllabus and introductions

   - **Keywords** (look up at: www.wikipedia.org): international development; Human Development Index; Happiness economics.
   - **Videos**: small world (6min); Millennium Development Goals (4min); Problems with GDP (8min); Economics of Happiness (4min). Human Development Trends; http://www.gapminder.org;
• “The End of Poverty”, The Economist, June 1st, 2013
  http://www.economist.com/news/leaders/21578665-nearly-1-billion-people-have-been-taken-out-extreme-poverty-20-years-world-should-aim

3. What are the origins of and current solutions to underdevelopment and poverty? What role does globalization play?

• **Keywords** (look up at: www.wikipedia.org): Washington Consensus; United Nations System; MDGs; Four Freedoms (European Union);
• **Videos**: The case for free trade (6min); The Myths of Free Trade & Markets (19min: from min13 to min32); Stiglitz on markets (4min); Fair Trade (7min); Chomsky on Globalization (11min); Jeffrey Sachs interview (10min); The world is flat (3min); The end of poverty? Think again (3min). Inequality for All (Robert Reich)
  http://www.iie.com/publications/papers/paper.cfm?researchid=486#1
• Ha-Joon Chang (2003), “Kicking Away the Ladder: The ‘Real’ History of Free Trade”;
• Joseph Stiglitz (2002), “Globalism's Discontents”,
  http://www.prospect.org/cs/articles?article=globalisms_discontents
  (Press Release)
• Jeffrey Sachs (2005), “The End of Poverty”,
  http://www.time.com/time/magazine/article/0,9171,1034738,00.html

4. ICT for Development: overview and state-of-the-art

• **Keywords** (look up at: www.wikipedia.org): ICT4D
• **Videos**: Social networking for development (16min); Where was this Google all this time? (7min);
  Rural digital divide in Honduras (3min); Effects of increased communication (17min).

Everyone should read:


Have a look at a few of the following resources. Individual students will be asked to give a quick overview of each one.

  http://www.itu.int/ITUD/ict/publications/idi/index.html
5. The nature of technological change and the theory of technological innovation.

- **Keywords** (look up at: www.wikipedia.org): The Structure of Scientific Revolutions; Technological determinism; Technological convergence; innovation; evolutionary economics; general-purpose technology; Kondratiev waves; creative destruction; technological innovation system
- **Videos**: Exponential technological progress (23min); Dominant Design (10min); Claude Shannon: Father of the Information Age (29min).

6. The digital divide: origins, reality and outlook of a challenge far beyond access

- **Keywords** (look up at: www.wikipedia.org): digital divide; Diffusion of Innovations; Telecentre, social network.
- **Videos**: Digital divide in U.S. (2min); Brainstorming on solutions (2min); Watch an innovation diffuse in 3 min (3 min).
7. Low-cost access, telecenters, cybercafés and connected libraries

- Videos: One laptop per child (16min).
- Selected section of Global Impact Study final report
- Michael Best (2003), “The wireless revolution and universal access”. In Trends in Telecommunications Reform. ITU;

8. Creative destruction and digital transformation

- Videos: Social Networks (18 min); ICT4D examples (10 min).

9. Mobile phones and development

- Videos: Impact of mobile phones in Africa
Welfare in the South Indian Fisheries Sector”, Quarterly Journal of Economics, 122, 3; 
http://www.mitpressjournals.org/doi/pdfplus/10.1162/qjec.122.3.879

- Donner, Jonathan, & Tellez, Camilo A. (2008). Mobile banking and economic development: 
  Linking adoption, impact, and use. Asian Journal of Communication 18(4) 318-332. (alternate 
  link to preprint version)

- Vodafone: Africa: The Impact of Mobile Phones (2005) 

- Economist special report on telecoms in emerging markets 
  (http://www.economist.com/node/14483896?story_id=14483896)

Make sure you read these six articles in the special report:
1. Mobile marvels
2. Eureka moments
3. Up, up and Huawei
4. The mother of invention
5. Beyond voice
6. Finishing the job

10. Open Development

- Smith, M., Open Development: A New Theory for ICT4D, ITID 7.1
- Articles from ITID special issue on Open Development (ITID 7.1, Spring 2011 
  http://itidjournal.org/index.php/itid/issue/view/40)
- Weber, S. Open Source Software in Developing Economies. Available at 
- Benkler, the wealth of networks. chapters 3 and 4 
  (http://cyber.law.harvard.edu/wealth_of_networks/Main_Page)

11. Review and discussion of class projects

The content of the following weeks will depend on the research interests of students. Students will 
select individual research topics. We will have student presentations during the remaining classes. 
Here are some topic suggestions, but students are invited to propose their own topics:

Poverty Reduction by digital means

- Randy Spence (2003), “Information and Communications Technologies (ICTs) for Poverty 
  Reduction: When, Where and How?”, IDRC; http://network.idrc.ca/uploads/user-
  S/10618469203S_ICTPov_18_July.pdf
  http://web.idrc.ca/uploads/user-S/10541291550ICTPovertyBiblio.doc
- Don Slater and Jo Tacchi (2004), “ICT innovations for poverty reduction”, UNESCO, 
  http://unesdoc.unesco.org/images/0013/001361/136121e.pdf
**Intellectual Property Rights**


**Public and private policies and strategies for digital development: leapfrogging into the digital age**

- **Keywords**: (look up at: www.wikipedia.org): aid; forecasting; Delphi method; agenda setting and policy processes; eEurope2002/2005/i2010.

**Economic Growth and digital productivity**

- Keywords: Productivity paradox. Videos: ICT, productivity and growth;

**Entrepreneurship for development: how innovations and business ideas tackle poverty and foster development.**

- **Keywords** (look up at: www.wikipedia.org): Entrepreneurship; Microfinance; Social Enterprise; Bottom of the pyramid; innovation outside the box.
- **Videos**: Technology And Microfinance (2min); Fighting Poverty With Innovation (19min).

**e-Business and e-commerce**

**Women and ICT**
• Cecilia Ng and Swasti Mitter (2005), “Gender and the Digital Economy: Perspectives from the Developing World”, http://books.google.com

**e-Democracy, transparency and participation**
• Keywords: Nineteen Eighty-Four; eRulemaking; e-democracy; e-voting; Freedom of information legislation. Videos: e-dictatorship.
• Manuel Castells, et.al. (2007), “Mobile Communication and Society: Ch. 7: The Mobile Civil Society: Social Movements, Political Power, and Communication”.
e-Education

  http://www.humantechnology.jyu.fi/archives/october05.html
  http://publications.becta.org.uk/display.cfm?resID=25948
- OECD (2007), “Giving Knowledge for Free: The Emergence of Open Educational Resources” ,  
  http://www.oecd.org/dataoecd/35/7/38654317.pdf

e-Health

- Keywords: Healthcare IT News, iHealthBeat.
- WHO (2006), “eHealth tools and services: needs of the member states”,  
  http://www.who.int/kms/initiatives/tools_and_services_final.pdf
- Karl Stroetmann, et. al. (2006), “eHealth is Worth it: The economic benefits of implemented eHealth solutions at ten European sites”,  
- Empirica (2009), “Benchmarking ICT use among General Practitioners in Europe”;  
  http://www.ehealth-indicators.eu/

e-Government

  http://www.unpan.org/egovkb/global_reports/08report.htm (see also reports 2003, -2010)
  http://www.insidepolitics.org/policyreports.html (see also reports 2000-2006)
  http://www.sed.manchester.ac.uk/idpm/research/publications/wp/igovernment/index.htm (see also other papers)
  http://www.cepal.org/ddpe/publicaciones/xml/7/28647/W129.pdf

Environment and digital disaster management

- Keywords: Sustainable development. Videos: mobile disaster response.
  http://www.usc.edu/libraries => eJournals
  http://www.usc.edu/libraries => eJournals
- Kathrin Stolzenburg (2007), “Regional Perspectives on Digital Disaster Management in Latin America and the Caribbean”, UN,  