Course Description

This course examines the design, deployment, adoption, and use of Information and Communication Technologies (ICTs) in the context of international development with the goal of challenging the ways in which students think about poverty, development, technology, and the interplay between them. The focus of the course will be on the roles played by individuals and societies as active agents of technology adoption and use, in the context of constrained socioeconomic conditions and development concerns.

In this course, we will begin with creating a foundation by studying the history of applying technology towards achieving development goals and poverty alleviation. We will fast forward through the years to the recent upsurge in Information and Communication Technologies (ICTs) and discuss how these have featured in the domains of health, food, education, among others. Three design workshops through the semester will aim to inculcate design thinking skills for computer and social scientists alike, so that students can leave the course with the ability to listen to the needs of the poor and the marginalized and to do something about it.

There are no prerequisites. Students with an interest in computing for development, computing, or development are invited to take the course. Please be warned that you might feel unprepared to handle this course in the first few weeks. Rest assured that you will leave feeling like champions.

Course Schedule¹

January 11: Introductions
We will do introductions and take a brief look at course topics.

Readings:

¹ As of 12/20/15. The most up-to-date version can be accessed from the project website.
January 13: Design Jam
Through the first of three hands-on design workshops, students will get an overview of the
design thinking process to aid them in addressing the needs of under-served, under-represented,
and/or under-resourced communities.

Readings: None

January 20: Poverty
Poverty is measured in ways that may or may not appropriately represent how it is experienced.
We will discuss top-down and ground-up approaches to assessing poverty. There will also be an
in-class exercise on poverty assessment.

Readings:
• Banerjee, A. & Duflo, E. (2011). “Think again, again” in Poor economics: A radical rethinking of
the way to fight global poverty. PublicAffairs. Browse the book’s website http://pooreconomics.com
• Gates, B. (2013). “GDP is a terrible way to measure a country’s economy and it hinders our
ability to help the poor.” In Slate: http://www.slate.com/articles/business/project_syndicate/2013/05/bill_gates_on_helping_the_poor_gdp_is_a_terrible_measurement.single.html

January 25: Development
This class will focus on the dominant discourses around the notion of development - when
these began and how they have evolved.

Readings:
• Thomas, A. (2000). “Meanings and Views of Development” In T. Allen and A. Thomas (Eds)
• Sen, A. (2001). “What is Development About?” In Meier, G. and J. Stiglitz (Eds) Frontiers of
practice in the global South. Media, Culture & Society, 35(7), 898-905.

January 27: Technology
In the context of poverty and development, how has technology played a role? We will discuss
the interplay between technology and society.

Readings:

February 1: Thinking Big - Do dams have politics?
Using the example of the Akosombo Dam, we will discuss top-down approaches to development.

Readings:

February 3: Thinking Big - Green Revolution or agricultural disaster?
Using the example of the Green Revolution, we will discuss top-down approaches to development. This will also include an in-class debate where student teams will argue for or against the Green Revolution.

Readings:

February 8: Thinking Small - Small is Beautiful
We will discuss what development means bottom-up, with a focus on appropriate technology.

Readings:

February 10: Thinking Small - Building Up
We will discuss what development means bottom-up, with a focus on participatory approaches.

Readings:
February 17: Technology, Development, and Poverty - Across the Years
We will fast-forward across the information age to discuss what access, appropriation, and the 'digital divide' mean in today's world. Students will debate and discuss Facebook's Internet.org initiative.

Readings:
- [The Logical Indian]

February 22: Design Workshop II
Through the second of three hands-on design workshops, students will continue to build their design acumen towards addressing the needs of under-served, under-represented, and/or under-resourced communities.

Readings: None

February 24: Project Pitches
We will discuss what the final deliverables for this class will entail. Students will pitch ideas, form interdisciplinary teams based on interest areas, and decide how they would like to proceed towards their final papers and projects.

Readings: None

February 29: Guest Lecture by Dr. Ellen Zegura
We'll hear from Tech’s very own Dr. Ellen Zegura and her experiences with fieldwork and computing for good.

Readings: TBD

March 2: No Class

March 7: Design and the Field
We will look at how ICTD scholars address the challenges of designing in the field.

Readings:

March 9: Project Checkpoint
Project teams will get 90 minutes to make progress on their project ideas.

Readings: None

March 14: Food
This class will entail a 30-40 minute interactive lecture delivered by a student team and a 40-50 minute class discussion led by the instructor.

Readings: TBD (Teams will decide)

March 16: Health
This class will entail a 30-40 minute interactive lecture delivered by a student team and a 40-50 minute class discussion led by the instructor.

Readings: TBD (Teams will decide)

March 21: No Class

March 23: No Class

March 28: Education
This class will entail a 30-40 minute interactive lecture delivered by a student team and a 40-50 minute class discussion led by the instructor.

Readings: TBD (Teams will decide)

March 30: Money
This class will entail a 30-40 minute interactive lecture delivered by a student team and a 40-50 minute class discussion led by the instructor.

Readings: TBD (Teams will decide)

April 4: Entertainment
This class will entail a 30-40 minute interactive lecture delivered by a student team and a 40-50 minute class discussion led by the instructor.

Readings: TBD (Teams will decide)
April 6: TBD
This class will entail a 30-40 minute interactive lecture delivered by a student team and a 40-50 minute class discussion led by the instructor. Students will decide the theme of this class based on a vote.

Readings: TBD (Teams will decide)

April 11: Design Workshop III
Through the last of our three hands-on design workshops, students will review their design skills before heading out in the world to address the needs of under-served, under-represented, and/or under-resourced communities.

Readings: None

April 13: Piecing Together the Puzzle
We will have an in-class exercise that will focus on what makes for good ICTD research. Teams will choose different ‘pieces of this puzzle’ and do short presentations to summarize for the class what we learned about ICTD. Each team will pick a different piece, out of ‘design’, ‘fieldwork’, ‘methodology’, etc.

Readings:
• Burrell, J. & Toyama, K. (2009). What Constitutes Good ICTD Research?

April 18: Jeopardy!
We will have our final course review in the format of Jeopardy (or something like it). No preparation required, but you do get brownie points (that is, extra credit) for a good memory.

Readings: Everything so far!

April 20: Final Presentations
What we’ve been waiting for all semester - final presentations of papers/projects. Time will be short, so teams should focus on what they’d like most feedback on as they write up their final reports.

Readings: None

Grading

1. Reading Responses (25%)
Questions will be posted on assigned readings and you will have one week to submit your responses – short answers (2-3 sentences) – to the questions. There will be a total of 5 reading responses due.

2. Student Teaching (20%)

You will experience first-hand what it’s like to teach a specific topic and try to engage the class in learning. Each of you will choose a topic to explore from this list: food, money, education, health, voice, and entertainment. You will team up with other students interested in the same topic and your group will be in charge of creating a 30-40 minute lecture for the class. You will get points for creativity!

3. Final Project (40%)

You will have the option of producing a final paper or final project. You can choose to do this individually or in teams of 2-4 people. For this project, you will have three deliverables: a 1-page proposal that outlines what you will study or design (5%), a final presentation – with room to incorporate feedback (15%), and the end-product – a final report (20%).

4. Class Participation (15%)

You will be expected to do the readings before coming to class. Please be ready to discuss them, ask questions, and engage in conversations on specific topics. We will have guest speakers, and you will be expected to come prepared for their talks and have questions for them. In addition, we will have in-class exercises, which will count for a total of 10% of your grade.

Attendance

Regular attendance is required and essential for you to succeed in this course. If for any reason you are unable to attend class, you must inform me in advance. Absences without legitimate excuses will negatively affect your class participation grade.

Canvas

Class-related announcements will be posted on Canvas, as will assignments, grading rubrics, slides from lectures, and grades. Students are welcome to discuss topics from class on Canvas.
Use of Technology in the Classroom

You are welcome to use your laptop, tablet, or cell phone in class, and will be trusted to be doing so in connection with class-related discussions. Use common sense, and make sure your device use doesn’t distract you or your classmates from participation.

Students with Disabilities

Please notify the instructor if you have any disabilities with which you need special assistance or consideration. The campus disability assistance program can be contacted through ADAPTS: http://www.adapts.gatech.edu

Honor Code Statement

Students are expected to adhere to the Georgia Tech Honor Code: honor.gatech.edu

Relevant Readings

Access:

• Medhi, I., Sagar, A., & Toyama, K. (2006). Text-free user interfaces for illiterate and semi-literate users. In Information and Communication Technologies and Development, (pp. 72-82). IEEE.

Voice:


Health:


Education:


Entertainment:


Money:


Markets:


Food:


ICTD:
