

Information and Communication Technologies and Global Development (ICTD) INTA 6745 Spring 2025

Course Information

Timing: MW 11.00am – 12.15pm

Office hours: Monday 2-2.30pm and as needed in TSRB 124. Please contact Christine Robinson crobinson323@gatech.edu to get on my calendar. Be sure to let her know you are a student in this class.

Location: TSRB Room 217A

Instructor

Michael Best

Professor

International Affairs & Interactive Computing

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This course is for students interested in taking a global perspective on technology, design, and questions around global development.

The first part of the course introduces students to narratives around global development and ICTD and how they have evolved over the years. The second half digs deeper to take a critical look at specific areas (e.g., health, education,

sustainability, gender) and connect technology design and adoption in these areas with approaches such as the choice framework.

Learning Outcomes

- Students will learn to unpack terms like “development” and “ICTD” and the role that technology has played in development, starting with the post-second world war era through the present.
- Students will learn how various technologies have played a role in key domains of global development, such as education, health, sustainability, and more.
- Students will learn to identify and critically examine approaches to the design of technological interventions in the context of global development.
- Students will learn to engage the approaches they learn about, and/or learn to analyze how other initiatives do the same.

Schedule

For this term, here’s what we shall read, what is due, and what will be accomplished in class. Please note some plans are TBD and will be fixed closer to the date. And this schedule is subject to changes which will be announced in class and on Canvas as required.

Date	Topic	Readings	Aim	Due	Guide
1/6	Introductions	None	Getting to know the course and content, and the instructor		

			Getting to know the students and their backgrounds		
1/8	15+ years of ICTD	Required: Best and Kumar, 2008	Understanding the interdisciplinary research program, its history, and evolution through the eyes of your humble instructor		Reading seminar
1/13	15+ years of ICTD	Required: Chen, Park, Darkwa, Holliday & Best, 2024; Khullar, Nkemelu, Nguyen & Best, 2023	Understanding the interdisciplinary research program, its history, and evolution through the eyes of your humble instructor		
1/15	Emerging ICTD perspectives	Required: Burrell, 2010; Ogbonnaya-Ogburu, et al., 2020; Heeks, 2008	Looking at the state of the ICTD conversation as we reach the present	Reflection 1 Show and Tell groups assigned	
1/20	HOLIDAY				
1/22	On Development	Required: Horner, 2017; World Bank, 2021	Examine the evolution of international development to global development	Reflection 2	

1/27	On Development	Required: Banerjee and Duflo, 2007; Sen, 1993	Examine the state of poverty or welfare economics	Show and Tell office hours throughout the week	
1/29	Theories and ICTD	Required: Erete et al., 2018; Karusala et al., 2019	How to read and consider theories and frameworks for ICTD research	Reflection 3 Show and Tell office hours throughout the week	
2/3	Theories and ICTD	Required: Kleine, 2009; Stanforth, 2007	How to read and consider theories and frameworks for ICTD research	Show and Tell office hours throughout the week	
2/5	Community Engagement	Required: Overview of Principles for Engaging in Equitable Research Partnerships with Communities, n.d.	How do we work with external partners and communities in global development	Reflection 4 Show and Tell office hours throughout the week	Expert panels

2/10	Student Panel	TBD	A chance to hear from students engaged in ICTD research		
2/12	Faculty Panel	TBD	A chance to hear from faculty engaged in ICTD research	Reflection 5	
2/17	Intentionally left blank		A day to catch our breath before we shift to the Show and Tell		
2/19	Show and Tell 1				Student driven research discussions
2/24	Show and Tell 2				
2/26	Show and Tell 3				
3/3	Show and Tell 4			Midterm essay Project proposal office hours throughout the week	

3/5	Show and Tell 5			Project proposal office hours throughout the week	
3/10	Show and Tell 6			Project proposal office hours throughout the week	
3/12	INGO Panel	TBD	A chance to hear from international NGO practitioners	Reflection 6 Project proposal office hours throughout the week	
3/17	SPRING BREAK				
3/19	SPRING BREAK				
3/24	TBD			Project proposal	
3/26	TBD				

3/31	Project workshop		We will have two weeks to help prepare final projects. Special guests will be brought in to consult, brainstorm and ideate		Project work and presentations
4/2	Project workshop				
4/7	Project workshop				
4/9	Project workshop				
4/14	Project presentations 1				
4/16	Project presentations 2				
4/21	Project presentations 3 and course farewell				

4/30	Final project due				
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References

1. Best, M. L., & Kumar, R. (2008). Sustainability Failures of Rural Telecenters: Challenges from the Sustainable Access in Rural India (SARI) Project. *Information Technologies and International Development*, 4(4), 31–45.
2. Chen, A. Z., Park, C., Darkwa, A., Holliday, R. C., & Best, M. L. (2024). “We’re Not in That Circle of Misinformation”: Understanding Community-Based Trusted Messengers Through Cultural Code-Switching. *Proceedings of the ACM on Human-Computer Interaction*, 8(CSCW).
3. Khullar, A., Nkemelu, D., Nguyen, C. V., & Best, M. L. (2023). Hate Speech Detection in Limited Data Contexts using Synthetic Data Generation. *ACM COMPASS 2023*, Cape Town, South Africa. Burrell, J. (2010). Evaluating Shared Access: Social equality and the circulation of mobile phones in rural Uganda. *Journal of Computer-Mediated Communication*, 15(2), 230–250.
4. Ogonnaya-Ogburu, I. F., Smith, A. D. R., To, A., & Toyama, K. (2020). Critical Race Theory for HCI. *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, 1–16.
5. Heeks, R. (2008). ICT4D 2.0: The Next Phase of Applying ICT for International Development. *Computer*, 41(6), 26–33.
6. Freire, P. (2005). *Pedagogy of the oppressed* (30th ed.). Continuum.
7. Banerjee, A. V., & Duflo, E. (2007). The Economic Lives of the Poor. *The Journal of Economic Perspective*, 21(1).

8. Sen, A. (1993). The Economics of Life and Death. *Scientific American*, 268(5), 40–47.
9. Horner, R. (2017). What is Global Development? (Vol. 2017, No. 20; Global Development Institute Working Paper Series).
10. World Bank. (2021). *World Development Report 2021: Data for Better Lives*. Overview Booklet. The World Bank.
11. Erete, S., Israni, A., & Dillahunt, T. (2018). An intersectional approach to designing in the margins. *Interactions*, 25(3), 66–69. <https://doi.org/10.1145/3194349>
12. Karusala, N., Holeman, I., & Anderson, R. (2019). Engaging Identity, Assets, and Constraints in Designing for Resilience. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1–23. <https://doi.org/10.1145/3359315>
13. Kleine, D. (2009). ICT4What? - Using the Choice Framework to operationalise the capability approach to development. *2009 International Conference on Information and Communication Technologies and Development (ICTD)*, 108–117. <https://doi.org/10.1109/ICTD.2009.5426717>
14. Stanforth, C. (2007). Using Actor-Network Theory to Analyze E-Government Implementation in Developing Countries. *Information Technologies and International Development*, 3(3), 35–60. <https://doi.org/10.1162/itid.2007.3.3.35>
15. Overview of Principles for Engaging in Equitable Research Partnerships with Communities | Center for Sustainable Communities Research and Education. (n.d.). Retrieved December 15, 2024, from <https://scre.research.gatech.edu/overview-principles-engaging-equitable-research-partnerships-communities>

Assignments

1. Reflections — 20%
2. Midterm Essay — 10%
3. Show & Tell — 25%
4. Project Deliverables — 30%
5. Class Participation — 15%

A grade that is cumulatively 90% or higher counts as an A, 80%-90% as a B, 70%-80% as a C, 60%-70% as a D, and below 60% as an F.

1. Weekly Reflections

For 6 weeks as indicated in the schedule above, students are expected to read the week's assigned readings and submit a ~150-200 word reflection on the assigned Canvas discussion channel (e.g., #reflection1 #1, etc.) as a post by midnight that Thursday. This is so that you read, discuss, reflect through the week and then put thoughts in writing. You are additionally expected to engage with at least 1 other reflection before next Monday's class.

These are lightweight assignments, intended for students to (a) engage deeply with weekly readings, (b) express thoughts in writing, since not everyone will have the chance or willingness to speak in class, and (c) engage with similar and different perspectives of others in the class. Note that these written assignments are especially key for those who are inclined to participate less vocally in class.

Through these reflections, students are encouraged to connect ideas they pick up in class *with ideas outside that they have encountered in other classes, work experiences, life, etc.* The aim is to take the readings a little farther, so that students are able to see an impact in their lives beyond the class.

There will be 9 reflections. Each reflection is worth 2 points: 1 point for submitting a post on time and in the assigned Canvas channel on point, cogent, and of the right length, and 1 point for engaging with other reflections by the Monday deadline. No late submissions will be graded.

2. Midterm Essay

There are two options, as outlined below.

One: Students can choose to do an informational interview with someone who they know has done work in global development, or any topics that features in this syllabus.

Two: Students can choose to do a review of a book that is included among the optional texts listed in this syllabus or a book that has been pre-agreed to by the instructor.

Students will then write an essay on how the interview/book related to ideas touched upon in the class, showcasing their ability to connect concepts learned in class with the “outside world”. Students will need to immediately establish the connections between the person/book and the class. They are then expected to delve deeper into the main ideas that surfaced in the interview/book, and reflect on them based on lessons learned in class. The writing and presentation must be free of grammar/typographical errors, following a clear logical outline. The cogency of the argument/narrative should be evident.

For each essay, the assignment can be approximately 2,000 words long, and must include appropriate citations, even if these cites are for readings included in this syllabus. These assignments will be submitted on Canvas. A Canvas assignment will be created for this at least a week in advance.

Students can receive a maximum score of 20 points. This includes 5 points each for:

Choice — relevance of person/book chosen

Connection — citing themes (3 or more) from class

Clarity — presenting clearly and concisely

Cogency — of narrative

The midterm will lose 5% of its points for each day it is turned in late.

3. Show & Tell

The Show & Tell is a group assignment, one for each of the special topic class slots. The class will be divided into six teams and each team will be assigned one of the six slots. Each team will need to meet and discuss potential topic areas and select one or two example readings. Then the team should secure a 30 minute meeting time with the instructor to discuss the topic and readings. The instructor will have opinions and don't take it wrong if there is some adjustments and refinements made during office hours! Finally, prepare a 30 minute presentation plus q&a where you overview the papers and then present 1-2 case studies that highlight the ideas and connections the readings are trying to make. Most of your presentation must focus on connections and broader issues. These real-world examples should aim to concretize the learnings of the week.

Students can receive a maximum team score of 20 points. This includes 5 points each for:

Connection — developing connections to course readings

Clarity — presenting clearly and concisely

Creativity — engaging and interacting with the audience

Cognition — answering questions well

Teams are expected to align with but go beyond course materials on the topic being covered. They must be crisp and concise in their presentation, with high quality slides. They must attempt to engage the audience by making their presentations interactive in some form. Finally, different students (not only one lead) should be able to answer the questions that come up in the Q&A. The entire team will receive the same grade, no matter the performance of individuals.

Potential topics to consider (in no particular order!):

Peace, Gender, Health, SDGs, Sustainability, Networks, Disability, Agriculture, Food Security, Queerness, Economic Development, Livelihoods, Digital Divide, Games and Play, Democracy, Social Media, Citizen Services, Faith and Religion.

Unexcused absence during your show-and-tell will receive a zero for that student.

4. Final Deliverable

The final deliverable is a group assignment as well. It is intended to encourage students to take what they learn in class into the real world, challenging and encouraging them to step out of their comfort zone/their normal ways of thinking about the world in some depth. The pitch will entail a succinct description of what the individual/team wishes to study (and why). In the one-page proposals, these ideas will be more scoped out. During peer feedback, each team will give two other teams constructive feedback on what they could do more of, or do differently. In the presentations, which will take place at the end of the term, teams will summarize their lessons learned for the term. The final deliverable due at the end of the semester will be a project report (team) or a paper (individual).

There are three options. Read below.

Discover: Using qualitative or quantitative methods such as interviews (12+ respondents), semi-structured surveys (30+ respondents), online surveys (50+ respondents), etc. Teams of 2-4 students can choose to uncover problems at the

intersection of a technological system and a development context. The final deliverable would entail a written treatment of themes uncovered in the findings. The paper would include a review of methods, results, and discussion.

Design: Using design methods such as participatory design (20+ respondents), teams of 2-4 students can choose to do a lightweight cycle of need-finding, prototyping, and evaluation. The focus here must also be on addressing a problem at the intersection of technology and development. The final deliverable would be a process report, listing the outcomes at each stage.

Theorize: As individuals or pairs, students can offer a literature survey of a particular topic, engaging deeply on a theoretical level, and identifying implications for the real world.

Students can receive a maximum team score of 60 points for:

Proposal — (10 points) (see below)

Peer Feedback — teams will give each other feedback during class (10 points)

Presentation — 15 mins presentation and q&a in class (10 points)

Report — final deliverable (30 points)

For your project proposal, please be sure to provide the following information:

Team Name

Team Members

Project Type: Discover/Design/Theorize

Project Statement (<= 200 words): Please make sure to address access, scope, and relevance as you frame this.

Motivation (<= 200 words): Using existing resources, motivate the project goals.

Plan (<= 200 words): Timeline for the work that will go into the final deliverable on a week-by-week basis.

A proposal will receive 10 points if they do a great job with addressing access, scope, and relevance (3 points), is appropriately motivated (3 points), and has a well laid out timeline that shows steady progress and concretely outlined steps, per team member (4 points).

More details on the expectations for the final project deliverable and presentation will be given during class time. For peer project feedback the submission will be 3 bullet points of feedback from each group not presenting due by the end of the presentation day.

The proposal and final project document will receive a 10% reduction in points for each day it is turned in late. Unexcused absence during your in class project presentation will receive a zero for that student.

5. Class Participation

Almost everything in class is learned from thoughtfully engaging with the readings and showing up. This set of points is for the latter. Students will be encouraged to share their thoughts in class and on Canvas (in between class sessions, at their convenience), and participate actively in group work. Attending office hours is encouraged. If at any point during the semester students are uncertain about what their grade for this might look like, they are encouraged to ask.

Students can receive a maximum score of 10 points for:

Maintaining attendance

Giving 24-hr notice for absences

Not missing more than 1 class

Getting to class on time

Leaving only once class has ended

Not using personal devices unless asked

Staying engaged and participating in class conversations

Doing the readings

You can miss 1 class, no questions asked. Please use this wisely. You will still be expected to catch up with others and make up for what was missed. Outside of this one class, you must be able to provide a doctor's note if you are unwell, official confirmation of an interview, evidence of any emergencies, etc.

Course Policies

Inclusion and Respect

We support the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in the broader society. Some of the topics covered in class may be sensitive or surface opportunities for debate and difference. Students are required to demonstrate respect and courtesy and are encouraged to maintain a safe space that allows others to freely and safely express their views without judgment.

Excused Absence

We will follow the guidelines listed here to determine what counts as an excused absence:

<http://www.catalog.gatech.edu/rules/4/>.

Communication

Whenever the need arises, students are encouraged to send direct messages to the instructor on email. Students are also requested to give at least one full business day for a response, though we will generally try to be more prompt.

Academic Integrity and the Honor Code

While students are encouraged to work together and collaborate, they should clearly differentiate their work from that of others, including peers and bibliographical sources. Complete and accurate representation of all direct quotations and

paraphrased material is required. Plagiarizing will be addressed in accordance with the Georgia Tech Honor Code (<https://policylibrary.gatech.edu/student-life/academic-honor-code>). Any use of generative AI must be fully cited similar to if it was a direct quote from some other resource. This material will be treated in the same way as a direct quote, e.g. it could be used for some purpose in a deliverable but can't be a significant amount of the prose or be considered as the author's original work.

Turnitin will be used to assess the amount of AI generated content in the midterm and final submissions. If your Turnitin score is over 40% and below 80% I will carefully evaluate the suspect portions of the paper and will return the paper to you for any necessary revisions. If your revised submission is still over 40% you will be reported to OSI and they will make a determination. If the score of your initial paper is above 80% the paper will be reported directly to OSI for their determination.

Accessibility

The Georgia Institute of Technology is committed to providing both physical accessibility and access to information resources and technologies to individuals with disabilities. Please see this website for further information - <http://www.gatech.edu/accessibility>.

Optional Texts

These below are just *some* texts that can be used for the Midterm Essay assignment. There are many more incredible and relevant books out there and students can use any of those. The recommendation would be to check in with the teaching team about other books that may be of interest.

- The Charisma Machine by Morgan Ames
- Race After Technology by Ruha Benjamin
- Invisible Users by Jenna Burrell

- Intersectionality by Patricia Collins & Sirma Bilge
- Data Feminism by Catherine D'Ignazio & Lauren Klein
- Encountering Development by Arturo Escobar
- Designs for the Pluriverse by Arturo Escobar
- Pluriversal Politics by Arturo Escobar
- Automating Inequality by Virginia Eubanks
- Winners Take All by Anand Giridharadas
- Ghost Work by Mary Gray and Siddharth Suri
- Dark Matter & Trojan Horses by Dan Hill
- Chasing Innovation by Lilly Irani
- This Changes Everything by Naomi Klein
- All Data are Local by Yanni Loukissas
- Feminism Without Borders by Chandra Mohanty
- Algorithms of Oppression by Safiya Noble
- Creating Capabilities by Martha Nussbaum
- Invisible Women by Caroline Criado Perez
- Small is Beautiful by E. F. Schumacher
- Geek Heresy by Kentaro Toyama
- Technology of the Oppressed by David Nemer

Additional Considerations

- If students are concerned about how they will be evaluated, we encourage them to ask as early as possible. This applies to class participation credit in particular. In the meantime, it is worth remembering that we will be careful to note different types of participation across all class channels.

- Students are encouraged to attend office hours when possible, even if they have nothing in particular to ask or discuss. This helps us get to know each other a little better. Think of these as coffee hours and I have a nice range of coffee and tea available!
- There may be minor changes to the syllabus through the semester and they will be announced in class as well as on Canvas. Students should stay up to date by getting in touch with a friend or the teaching team, if/when they end up missing class.

Credit

This course was originated by Prof. Neha Kumar. The structure of the class, some of the readings, and language in this syllabus is her work. Thank you, Neha!