

## **1. Course Title (Course Code)**

ICT4D Special Experiment 1(Welfare, and Health-care, and Education) (2282)

## **2. Instructor**

Nsenda Lukumwena

## **3. Term**

Fall 2 (M2 students only)

## **4. Outline and Objectives**

The course will: (i) help students understand the key elements of urban, peri-urban and rural space structure; and (ii) highlight ways in which the integration of ICT4D into social infrastructure (health, Education, Culture, Safety and Residents' civic services) can and will creatively and smartly improve delivery of social services in developing countries.

Today, the affordability and affordance of ICT4D, as opposed to other infrastructures typically associated with physical planning (roads, buildings, land lines, etc.) makes it an excellent tool for delivery of social services.

Through case studies and seminars, students will learn from each other, acquire skills necessary to initiate social projects that are appropriate problem-solving fit to the specific needs of their regions. That way, students will be able to contribute to the general development of their countries of origin.

## **5. Goals (Attainment Targets)**

- (1). Gain skills to read through the many layers of the urban, peri-urban and rural space structure and analytically interpret it so as to, affordably, integrate ICT into the social infrastructure (welfare health, and Education) of a specific area.
- (2). With the skills acquired in (1) students will gain a relative capacity to identify functional and dysfunctional factors related to welfare, healthcare and Education of the urban and/or rural settlements of given areas through case-studies with respect.
- (3). Building on (1) and (2), students can thus initiate social projects in which they integrate ICT4D into the social infrastructure addressing specifically delivery.

## 6. Correspondence relationship between Educational goals and Course goals

Educational goals			Course goals
High level ICT skill	Basic academic skills		(1)
	Specialized knowledge and literacy		(2), (3)
Human skill (Tankyu skill)	Ability to continually improve own strengths		(3)
	Ability to discover and resolve the problem in society	Problem setting	(2)
		Hypothesis planning	
		Hypothesis testing	
		Practice	(3)
	Fundamental Competencies for Working Persons	Ability to step forward	
		Ability to think through	
		Ability to work in a team	
Professional ethics			

## 7. Course Requirements

None.

## 8. Textbooks

None.

## 9. Reference Books

1. Human Centered Design Tool Kit 2nd Edition 2011 by IDEO
2. Publications: ICT interventions related Articles
3. Creative Cities
4. The City Shaped: Urban Patterns and Meanings By Spiro Kostof
5. Rethinking the informal City—Critical Perspectives from Latina America edited by Felipe Hernandez and Lea K. Allen
6. GIS Organisations and People A Socio-technical Approach by Derek Reeve and James Petch Published in 1999

**10. Evaluation**

Goals	Evaluation method & point					
	term-end exam	quiz	report	presentation	deliverable	other
(1)		○	○	○		
(2)		○	○	○		
(3)			○	○		
Allocation		10	60	30		

**11. Notes**

Basic familiarity with social, urban and regional development issues in developing countries.  
 Willingness to learn and challenge oneself, commitment and creativity.

No exam is required. Term report and presentation are required instead.

Course reading references will be provided to students timely.

## Course Schedule

(Notice) This schedule is a tentative plan; there might be changes, additions, and revisions etc. at the time of delivering the course.

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### **Lesson 1: Understanding the fundamentals of Urban, peri-urban and Rural Space Structure (Lecture, 90min.)**

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Synoptic overview of the spatial layers that form the complexity of urban and rural settlements in history.

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### **Lesson 2: Understanding the Physical Infrastructure Components (Lecture, 90min.)**

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Specifically introducing the city generic forms (organic pattern, the grid, the city as a diagram, the grand manner and the skyline)

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### **Lesson 3: Understanding the Social Infrastructure of the settlement (Lecture, 90min.)**

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Culture, Education, health, welfare, safety and residents services will be covered.

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### **Lesson 4: Understanding the Environmental Structure (Lecture, 30min. Interactive, 60min.)**

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The course addresses issues related to climate change, city sprawl in Africa and related impact on the social infrastructure (education, welfare, healthcare).

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### **Lesson 5: Comparative space structures in developing countries part-1 (Lecture, 60min. Interactive, 30min.)**

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Building on lessons 1-4, lesson 5 will initiate a Comparative study on space structures cross-culturally. Students will research on space structures of their own countries. This part of the course is intended to generate a cross-cultural active learning (student to student).

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### **Lesson 6: Comparative space structures in developing countries part -2 (Interactive, 90min.)**

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Students will then report on their respective city structure' findings. This part of the course is intended to generate a cross-cultural and active learning (student to student).

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### **Lesson 7: Interrelations between social and physical spaces (Lecture, 60min. Interactive, 30min.)**

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Reading the social content of physical spaces, at the urban and domestic scales. This will prepare students to step into interpreting what in space arrangement may or may not impact on the quality of social life.

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### **Lesson 8: Land use and socio-cultural content Part-1 (Lecture, 90min.)**

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Fundamentals of the land-use in history, including pre/post colonial practices in developing countries.

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### **Lesson 9: Land use and socio-cultural content Part-2 (Lecture, 30min. Interactive, 60min.)**

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Analytical reading on how the land-use in history relates to current social infrastructure of the cities and/or of the rural areas.

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### **Lesson 10: Mobility in the city and the society (Lecture, 90min.)**

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Relation between mobility and the social infrastructure in developing countries.

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**Lesson 11: Social sustainability** **(Lecture, 60min. Interactive, 30min.)**


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This lesson addresses innovative design and socially marginalized settlements in developing countries.

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**Lesson 12: Learning from urban poverty Part-1** **(Lecture, 60min. Interactive, 30min.)**


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This lesson introduces a few examples of positive and innovative ideas that can be found out in urban poverty, be this in the developed world or in the developing countries. Students are then asked to search and find similar examples for presentation.

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**Lesson 13: Learning from urban poverty Part-2** **(Interactive, 90min.)**


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Students report on their findings on innovative design with respect learning from poverty. Like in lesson 6, students are engaged into a cross-cultural and active learning.

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**Lesson 14: Introducing the creative city** **(Lecture, 90min.)**


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Introduction of a range of approaches and methods to think creatively, to plan and act creatively, all of which are further more facilitated by the use of information technologies.

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**Lesson 15: Summarizing previous lessons** **(Lecture, 30min. Interactive, 60min.)**


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Discussing previous lessons in a debate format.

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**Lesson 16: Integrating ICT4D into the social infrastructure** **(Lecture, 60min. Interactive, 30min.)**


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A look into capacity building through media technologies and telecommunications –MTTC.

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**Lesson 17: Healthcare/Welfare care delivery** **(Lecture, 60min. Interactive, 30min.)**


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Understanding issues related to Health care in developing countries.

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**Lesson 18: Education delivery** **(Lecture, 60min. Interactive, 30min.)**


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Understanding issues related to Education in developing countries—a comparative approach in history.

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**Lesson 19: Safety delivery** **(Lecture, 60min. Interactive, 30min.)**


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Understanding issues related to Safety and its delivery in developing countries.

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**Lesson 20: Culture and its impact on social life** **(Lecture, 60min. Interactive, 30min.)**


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Understanding cultural changes in social life and how they relate to Health care and welfare in developing countries.

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**Lesson 21: Citizens services and wellbeing** **(Lecture, 60min. Interactive, 30min.)**


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Understanding issues related to residents' services in developing countries.

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**Lesson 22: Introducing the Human Centered Design Tool Kit (IDEO)****(Lecture, 60min. Interactive, 30min.)**

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Human Centered Design Toolkit and innovative solutions design

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**Lesson 23: Social, cultural changes in cities worldwide****(Lecture, 60min. Interactive, 30min.)**

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This lesson addresses the dramatic social and cultural changes that have occurred in recent years worldwide. A special emphasis is put on developing countries.

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**Lesson 24: Rethinking and Re-assessing the city in developing countries** **(Lecture, 90min.)**

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This lesson addresses the needs for cities, small and large, to reassess and rethink their role and positioning —regionally, nationally and globally given the interconnectivity created by new technologies, such as ICT4D

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**Lesson 25: From urban engineering to creative city-making****(Lecture, 60min. Interactive, 30min.)**

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Review of the shift in city-making paradigm in the last 30 years. Future living environments, urban and rural are likely to be the ones that encourage people to work with imagination.

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**Lesson 26: The power of cultural resources in creative cities****(Lecture, 90min.)**

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This lesson is a brief survey of the notion of urban cultural resources. This survey will help students from developing countries to understand the complexity of the city and changes in the paradigm of city-creation. This will prevent them from repeating mistakes committed in old cities in the developed world.

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**Lesson 27: Social Project Initiation—People as Assets Part-1****(Lecture, 30min. Interactive, 60min.)**

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Initiating a small project integrating the use of ICT into cities infrastructures, highlighting the fact that people's wellbeing in cities is an asset.

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**Lesson 28: Social Project Initiation—People as Assets Part-2****(Lecture, 20min. Interactive, 70min.)**

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Project development and Review—an interactive class where we all try to imagine a city project that is vital and vibrant socially, culturally and economically focusing on delivery.

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**Lesson 29: Summary and Review of lessons 16 thru 28 and Presentation****(Lecture, 10min. Presentation, 80min.)**

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Brief review of Concepts learned in previous lessons. Students Projects' Presentation.

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**Lesson 30: Final Evaluation**

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