1. Course Code

2274

2. Course Title

S7e:Urban Planning

3. Teacher

LUKUMWENA, Nsenda

4. Term

Spring 2

5. Course Requirements (Courses / Knowledge prerequisite for this course)

Basic knowledge of google earth usage.

6. Course Overview and Objectives

This course hopes to achieve a triangular knowledge sharing, teacher-student, student-student and teacher-students. The course introduces students of several backgrounds to basic notions of urban planning in order to help them better understand the environment in which they are likely to implement their respective research projects. The course thus focuses on the relationships between land use and land development tools, mobility, social content and policy. In this course students will then:

(1) learn the basics of urban planning and the role it plays in the development process of cities, both conventional and smart, in developed and developing economies (countries). With the acquired knowledge, students can approach urban issues and policy utilizing ICTs knowledge acquired from other courses;
(2) learn space syntax—an analytical tool to analyze and interpret the relationships between physical planning and social content through the study of people's movements. The acquired knowledge in space syntax will help students better analyze and understand any given physical environment, urban and rural and predict its successful usage. To further help the understanding of space syntax in practical terms, a group project is given to students whereby they explore the application of space syntax and evaluate their understanding of the course.
(3) learn ways to engage in a group project whereby each and every participant will learn from each other during the collaborative process period.

7. Course Outline

1 Overview of the evolution of cities and urban planning as well as recent trends in the practice of urban planning
Tis lesson presents a synoptic view of cities in history, from the legacy of the past to contemporary cities. Students learn the basics of urban planning from a historical point of view.

2 Introduction to Urban Planning—Basics of the neighborhood unit
Students will learn about the Neighborhood Unit following the Conventional model and the one suggested by New Urbanism.
For further understanding the notion of the Neighborhood Unit, Students will thus try to the model of Neighborhood that characterizes the city in which they live in their own country.

3 The role and power of Open spaces in the city
Open spaces are being revisited worldwide today in modernist, contemporary and old cities for their qualities and role they play today in urban settings.
Students will work in group to discuss the role played by open spaces in cities of origin, based of videos selected by the instructor.

4 The role of urban planning in the cities development process over time
Based on the lessons 1 through 3, Students engage in a workshop style group work where they discuss and demonstrate the role urban planning and how learned principles can be applied to sections (or a section) of a city to be chosen by the students and the instructor.

5 Space Syntax—Theory and practices
Space Syntax is a theoretical and practical tool used in urban planning to understand the social content of physical space arrangement through moments of people. Students will learn the basics of Space Syntax and apply its principles to a case study—Group Work.

6 Land use principles and the city form in history
Students will learn the basics of land use and the way they have been implemented historically in cities around the world, from hygienists to modernists to new urbanists

7 Land use and Land Consolidation/Readjustment (1)
In this lesson students will learn about the basics of land use, definitions, and some lessons from Japan.

8 Land use and Land Consolidation/Readjustment (2)
Following up on lesson (7) students will learn in detail about the role and applications of lan use and land consolidation/readjustment.
Students will be introduced to the notion of gentrification. A workshop on applicability of land consolidation will be applied to a case study to be decided by the students and the instructor.

9 Introduction to New towns—A synoptic survey of New towns in the world
Critical reading of New towns from a historical perspective
Students will, based on the critical analysis on some selected new towns, students will summarize their findings in a proposal of some improvement guidelines for own country.

10 Introduction to Smart Cities
Students will be introduced to the framework of smart cities. A comparative study of some smart cities, Singapour, Amsterdam, Barcelona, Johannesburg,etc. will be presented to further the understanding of the framework of smart cities.

11 Urban Transportation and Forms of Mobility
This lesson is about urban transportation, its numerous modes of mobility, including the role that it plays in relation to urban planning and development Students will learn about walkability and urban development.

12 Technology and Urban Planning - Public Infrastructures and SDGs
Technology is crucial to urban planning. Students will learn about the role, benefits and using and how to apply technologies in urban planning, particularly addressing urban communities.

13 ICT in Urban Planning
This lesson introduces students ICT application in urban planning. In urban planning, ICT can be conceptualized as new type of infrastructure providing for the the transport of data and information. ICT are bound to affect urban design through the processes of economic development and such changes in land uses as redevelopment.

14 Applications of ICT to urban planning, community design
ICTs have developed and evolved to be the main axis of the the third millennium and affect the way we live, interact and use space, physically and digitally.
In this lesson students will research on the many ways in which ICTS are being implemented in cities around the world and eventually summarize their findings in to a final report.

15 Final Project presentation and Evaluation
Students will make presentations of their respective final reports for a final evaluation.

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8. Textbooks (Required Books for this course)

None.

The course engages students in several discussions using extensively videos on current issues related to urban planning and urban design. Students are encouraged to come up with articles related to urban planning out of their readings guided by the course under my supervision. I usually pick up video material that students have a chance to read prior to the course. Such material include the following topics, mobility, rapid, medium and slow; public spaces, smart and creative cities, etc.

9. Reference Books (optional books for further study)

1. Human Centered Design Toolkit 2nd Edition 2011 by IDEO
2. Publications: Urban Planning
3. Creative Cities
4. The City Shaped: Urban Patterns and Meanings By Spiro Kostof
5. Rethinking the informal City?Critical Perspectives from Latin 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
7. Urban contemporary Planning by Levy, 2015
8. Urban Land Use Planning by Philip R. Berke, David R. Godschalk, and Edward J. King with Daniel A. Rodriguez, 2006.
9. E-Planning, ICTs for Urban Development and Monitoring by Carlos Nunes Silva, 2009
10. Urban Planning, 2nd Edition by Anthony J. Catanese and James C. Snyder, 1977
11. Building Smart Cities, Analytics, ICT, and Design Thinking 2016 by carol L. Stimmel, CRC Press
12. Infill (Re)development, An Optimal Approach for Citywide Informal Settlement Upgrading by Bashir Ahmad Amiri, Nsenda Lukumwena, 2019 LAMBERT academic Publishing, Germany

10. Course Goals (Attainment Targets)

(1) Gain analytical and interpretative planning skills likely to support appropriate planning and design interventions and/or policies.

(2) Understand the relationship between physical planning and social content—a key concept for undertaking the development of planning and its implementation in a fashion that earnestly fits the context of concern.

(3) Building on (1) and (2), students can thus (i) initiate projects that meaningfully and socially impact the targeted society and its urban domain; and (ii) effectively forecast the usefulness and effectiveness of the projected urban development of the initiated projects.

(4)
(5)
(6)
(7)
(8)

11. Correspondence relationship between Educational goals and Course goals

Educational goals of the school			Course Goals
High level ICT skills	Basic academic skills		(1), (2)
	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	(1), (2)
		Hypothesis planning	(1)
		Hypothesis testing	(3)
		Practice	(3)
	Fundamental Competencies for	Ability to step forward	(2)
		Ability to think through	(1),(2)

	Working Persons	Ability to work in a team	(3)
Professional ethics			

12. Evaluation

Goals	Evaluation method & point allocation					
	examination	Quiz	Reports	Presentation	Deliverables	Other
(1)			○	○	○	
(2)			○	○	○	
(3)			○	○	○	
(4)						
(5)						
(6)						
(7)						
(8)						
Allocation			40	20	40	

13. Evaluation Criteria

Examination	
Quiz	
Reports	The report details the project
Presentation	The presentation shows the ability of the student to sell one's
Deliverables	Students deliver a project comprising of a report and a visual
Other	

14. Active Learning

Hourly percentage of active learning within the whole class time		40%
1	Active learning such as problem solving assignment using the knowledge and skills acquired in class.	Sometimes
2	Active learning such as group works and discussions.	Sometimes
3	Outcome presentations and feedbacks.	Sometimes
4	Students actively make decisions on how the class should be conducted.	Sometimes

15. Notes

No exam is required. Term report and presentation are required instead.
Course reading references will be provided to students timely.

16. Course plan

(Notice) This plan is tentative and might be changed at the time of delivery

Lesson 1: Overview of the evolution of cities and urban planning as well as recent trends in the practice of urban planning

(Lecture 90 min)

This lesson presents a Synoptic overview of cities in history, from the legacy of the past to contemporary cities. Students are introduced to the basics of space structure, gathering and channeling spaces.

Lesson 2: Reading into gathering and channeling space

(Lecture 30 min, Interactive 60 min)

Students attempt to read into gathering and channeling spaces based on Kevin Lynch's image of the city principals and Louis Khan's interpretation of the street as Room.

Lesson 3: The role and power of Open spaces in the city

(Lecture 60min, Interactive 30 min)

The lesson reviews the role played by open spaces in the City generic forms in history—from organic patterns to the grid pattern to the city as a diagram, to the grand manner and the skyline.

Lesson 4:The role of urban planning in the cities (Lecture 90min)

This lesson explores the contribution of urban planning to the development process of cities and regions in the past and today, in developed and developing countries, from traditional to smart cities. Students are brought into discussing the extent to which new technologies impacting the city today and their future influence as technologies continue to evolve at exponential speed.

Lesson 5: Understanding the basic principles of the Neighborhood Unit

(Lecture 90 min)

A neighborhood unit is the smallest unit in urban planning. Students will learn the very basic principles of a neighborhood unit. Gaining an understanding unit enables the student to understand the functioning of basic movements that we all make on daily basis.

Lesson 6: Space Syntax and the use of ICTs in urban planning (1)

(Lecture 90min)

Introduction to the basics of Space Syntax, its application to urban planning/design, as well as the role of ICTs in the planning and design processes.

Lesson 7: Applying Space Syntax to an urban segment (2) (Interactive 90min)

Students apply the space Syntax principles to a given urban segment.

Lesson 8: Introduction to Smart Cities (Lecture 90min)

Discussing the framework of smart cities. Students prepare and engage in a discussion on smart cities both in the developed and developing countries.

Lesson 9: Functional Planning - Land use systems, including lessons from Japan

(Lecture 60min, Interactive 30 min)

Reading into Physical planning and urban design and urban development. Students will learn the difference between urban planning and urban design. Some lessons from Japan.

Lesson 10: Land consolidation, (Re)adjustment (1)

(Lecture 60 min Interactive 30 min)

Through the overview of the community master plan (or Community wide), students will gain an understanding of the land use Design and of the Real Estate Development. This section is valuable and critical for developing countries whose cities are dominated by informal sprawl and settlements that require a lot of fixes. At the end of the class students are asked to select a section of an informal city in their countries of origin for the next class.

Lesson 11: Land consolidation, (Re)adjustment, including some lessons from

(Lecture 30 min, Presentation 60 min)

Students select a section of an informal city in their own countries and apply the principles of land re-adjustment, present and self-evaluate their proposals.

Lesson 12: Functional Planning - Public Infrastructures and SDGs

(Lecture 90 min)

Students will learn about Public Infrastructure, values, and communities sustainability. Public Infrastructures include physical, social, environmental and digital infrastructures.

Lesson 13: Functional Planning - Urban Transportation—forms of Mobility

(Lecture 45 min, Interactive 45 min)

Students learn about Urban Public Transportation planning, systems and delivery. Rapid, medium and slow mobility are examined.

Lesson 14: Technology Planning

(Interactive Lecture 90 min)

Students will learn how to associate technologies (from the introduction of computers into planning to ICTs) to urban planning? be it physical, social or environmental.

Lesson 15: Presentation and Evaluation (Presentation, 90 min)

Students make their final presentation for evaluation.