Course syllabus

Spatial Planning

January – July 2024

Term VII

Lecturer

Carrión Puelles, Naldi Susan

I. General course information

Course Name:	**Spatial Planning**		
Pre-requisite:	Geographical Information Systems	**Code:**	7964
Precedent:	does not apply	**Semester:**	2024-1
Credits:	3	**Term:**	VII
Week Hours:	4 (2 hours of theory and 2 of practice)	**Course mode:**	On-Campus
Type Course and Faculty/University Department:	Mandatory unit Environmental Management Engineering	**Course Coordinator:**	Mayra Arauco Livia marauco@esan.edu.pe

II. Summary

The course gives students a grounding in the basic principles and objectives of Spatial planning. It brings an understanding of its systemic structure and practice by reviewing its application to national and global context. Moreover, the spatial planning interwoven structure with sustainable development and risk management is reviewed.

The course promotes the recognition and understanding of frameworks, components, tools, and techniques for the Spatial Planning analysis at national, regional and local level in Peru, strengthening its link with the ecological and economic zoning (EEZ), and land-use processes.

III. Course Objectives

To understand, and assess Spatial Plans draw up, outlined encompassing sustainable development and climate change challenges. Within this process, the student will be able to differentiate between rural and urban planning requirements, and from these perspectives understand how economic, social and environmental phenomena relates with resource, institutional and information management.

IV. Learning Outcomes

By the end of the course, and as a unit output, students will be able to:

1. Recognize and analyze Spatial Planning processes and their social, economic and environmental considerations.
2. Analyze and understand spatial planning historical evolution and its drivers.
3. Identify the implications of Spatial Planning when generating public policies and good governance.
4. Relates Spatial, Regional and Land-Use Planning concepts in the context of climate change, sustainable development and risk management.
5. Identify and evaluate Peruvian spatial planning integrated policies and regulations within climate change.
6. Identify and evaluate Peruvian spatial planning integrated policies and regulations.
7. Identify and analyze the process and components to drawing up the EEZ and its tools to prioritized options in SPs.

8. Identify and analyze the process and components to drawing up the Specialized Studies and its tools to prioritized options in SPs.
9. Apply theoretical knowledge and diagnostic techniques in a practical case.
10. Identify basic concepts related with Strategic Environmental Assessment and its drivers
11. Understand Spatial, Regional and local Planning concepts applied to urban and rural settings and its drivers.
12. Recognize the sustainable urban and rural planning approaches
13. Recognizes the information and communication technology application for spatial planning.
14. Recognizes Smart Cities initiatives as strategic tool to develop Sustainable Cities.
15. Apply theoretical and technical knowledge to analyze a spatial development selection, according to regulations and/or laws, and integrated with Urban, Zoning and other development Plans.
16. Compare and contrast methodologies implemented in other countries with Spatial Planning processes

V. Methodology

Lecturer's primary role will be to coach and facilitate student learning and overall comprehension of material. And to measure student's learning process, both formal and informal forms of assessment will be applied.

Students will receive theoretical and technical information through lectures and direct instructions, for different kind of participation and assessments. Thus, the students' active role will be assessed by developing individual and group essays, projects, presentations and class participation. Student learning is continuously measured through objectively scored tests and assessments.

Teaching-centered strategies
a. Induction
b. Awareness techniques
c. Demonstration
d. Problem-based teaching

Learning-centered strategies
a. Group work
b. Case studies analyses
c. Case studies debates
d. Interactive presentations

VI. Assessment

Requirements to pass the course

- Absent no more than 20% of programmed class hours in the semester, with absences duly justified.
- English language use to develop each class assessment.
- Minimum passing mark: 11.00
- Plagiarism: If proven, the mark awarded for the work assessed will be zero (0) and the student will be sanctioned according to university regulations.

The assessment system is permanent and comprehensive. The final course grade is obtained by averaging the continuous assessment (50%), the midterm exam (25%) and the final exam (25%).

The continuous assessment average (CAA) is obtained from the weighted average of the assessments of the student's work. The weightings of each continuous assessment are shown in the following table:

CONTINUOUS ASSESSMENT AVERAGE 50%		
Type of assessment	**Description**	**Weighting %**
Quizzes	Three (03) quizzes/forums participation during term	15
Test	Three (03) tests or case study presentations during the cycle –	20
Group work	1st report – Demography and Economy (25%)	40
	2nd report – Land Use and Coverage Changes (25%)	
	3rd report – Ecosystem Services (25%)	
	4TH report – Risk Identification and Management (25%)	
Practices Cases	Three (03) reports during the cycle	20
Class participation	Participation and involvement curing class.	5

The final average (FA) is calculated as follows:

$$\mathbf{FA} = (0.25 \times MT) + (0.50 \times CAA) + (0.25 \times FE)$$

Where:
FA = Final Average
MT = Midterm exam
CAA = Continuous assessment average
FE = Final Exam

VII. Program Content

WEEK	*CONTENT*	*ACTIVITIES / ASSESSMENT*
LEARNING UNIT I: INTRODUCTION TO SPATIAL PLANNING **LEARNING RESULTS:** **1.** Recognize and analyze Spatial Planning processes and their social, economic and environmental considerations. **2.** Analyze and understand spatial planning historical evolution and its drivers.		
1° **March 21th to 27th**	**Introduction to Spatial Planning** 1.1 Territory and land definition and the role of planning 1.2 Territory aspects 1.3 Regional and land-use planning definition. 1.4 Spatial planning definition and objectives. 1.5 Spatial planning principles and framework **Spatial Planning Evolution** Spatial planning application 2.1. Analyze and understand spatial planning historical evolution and its drivers in the Ancient Peru. 2.2. Spatial planning evolution in the ancient times around the world	- Course methodology review. - Continuous assessment review, detailing each process. - APA Referencing Style Review (APA Manual) - Guidance for Mendeley use in laboratory. 1st Discussion in Class: Do territory and land concepts mean the same? What is the full meaning of territory? What is the meaning of spatial planning?

	Read: Medeiros, E. (2019). Spatial planning, territorial development, and territorial impact assessment. Journal of Planning Literature. 34 (2), 171-182 https://doi.org/10.1177/0885412219831375 Hanson, J. W., Ortman, S. G., Bettencourt, L. M., & Mazur, L. C. (2019). Urban form, infrastructure and spatial organisation in the Roman Empire. antiquity, 93(369), 702-718. Alconini, S., & Malpass, M. A. (2010). Toward a Better Understanding of Inka Provincialism. In S. Alconini & M. A. Malpass (Eds.), Distant Provinces in the Inka Empire (pp. 279–299). Iowa: University of Iowa Press. Extra Reading Material: Economic Commission for Europe. (2008). Spatial planning: Key Instrument for Development and Effective Governance with Special Reference to Countries in Transition. Geneva, Switzerland, 1-12. Albrechts, L. (2004). Strategic (spatial) planning re-examined. *Environment and Planning B: Planning and Design*, *31*(5), 743–758. https://doi.org/10.1068/b3065 Wassenhoven, L. C. (2019). Introduction, Historical Periods and Examples. In the Ancestry of Regional Spatial Planning: A Planner's Look at History (pp. 7–44). Athens: Springer Nature Switzerland AG.	- 1st Quiz: Based on the following documentary Context: **1. What is Spatial Planning and Spatial Development** https://youtu.be/KPlSzF7ODhc **Questions to answer:** How Spatial Planning objectives change in terms of urban settings? **2. Superfoods and the environment - Avocados and blueberries from South America | DW Documentary** https://youtu.be/md5dgkDnZ9k **Questions to answer:** Does resource availability analysis enough to plan countries development? Does globalization impact land-use and our territory? Lectures
LEARNING UNIT II: SPATIAL PLANNING AND CLIMATE CHANGE **LEARNING RESULTS:** 3. Identify the implications of Spatial Planning when generating public policies and good governance. 4. Relates Spatial, Regional and Land-Use Planning concepts in the context of climate change, sustainable development and risk management.		
2° **Apr. 1st to 6th**	3.1 Governance and Spatial Planning 3.2 Conceptual framework of governability and the relationship with Spatial Planning. 3.3 Stakeholder involvement on spatial planning 4.1 Recognition of social, economic and environmental considerations for Spatial Planning.	- Lectures ○ Hand-In 1st Practice Case Report: 1st Practice Case Report: Case Analysis' Report, select between - González-García, A. C., Rodríguez-Antón, A., Espinosa-Espinosa, D., García Quintela, M.

	4.2 Implications of Spatial planning for sustainable development and Climate Change. Read: Wang, L. (2019). Spatial Planning and Governance: Literature Review. In Changing Spatial Elements in Chinese Socio-economic Five-year Plan: from Project Layout to Spatial Planning (1st ed., pp. 7–44). Beijing: Science Press, Springer Nature Singapore. https://doi.org/10.1007/978-981-13-1867-2 Wilson, E., & Piper, J. (2010). Spatial planning, climate change and sustainable development. In J. Glasson (Ed.), Spatial Planning and Climate Change (1st ed., pp. 3–17). New York: Routledge. Extra Reading Material: S. J., Crowley, G. M., Dale, A. P., Kennard, M. J.,Pressey, R. L. (2017). Making time for space: The critical role of spatial planning in adapting natural resource management to climate change. Environmental Science and Policy, 74 (May), 57–67. https://doi.org/10.1016/j.envsci.2017.05.003	V., & Aviles, J. B. (2019). Establishing a new order: the orientation of Roman towns built in the age of Augustus. *Archaeoastronomy in the Roman World*, 85-102.1st Presentation: Present findings of - Parcero-Oubiña, C., Fábrega-Álvarez, P., & Lynch, J. On the Periphery of the Inka Empire: Spatial Arrangement at the Pre-Hispanic Rock-art Site of Villavil 2 (Catamarca, Argentina). Cambridge Archaeological Journal, 1-21. - Szykulski, J. Genesis and expansion of the Tawantinsuyu Empire (Inca); its character, course and repercussions. - Alconini, S., & Malpass, M. A. (2010). Toward a Better Understanding of Inka Provincialism. In S. Alconini & M. A. Malpass (Eds.), Distant Provinces in the Inka Empire (pp. 279–299). Iowa: University of Iowa Press. - Wernke, S. A. (2006). The Politics of Community and Inka Statecraft in the Colca Valley, Peru. Latin American Antiquity, 17(2), 177–208. - Castillo Butters, J. L. (2004). Moche Politics in the Jequetepeque Valley: A Case for Political Opportunism. Lima. ○ 1st Presentation: Present findings of 1st Case Report

LEARNING UNIT II: SPATIAL PLANNING AND CLIMATE CHANGE
LEARNING RESULTS:

4. Relates Spatial, Regional and Land-Use Planning concepts in the context of climate change, sustainable development and risk management.
5. Identify and evaluate Peruvian spatial planning integrated policies and regulations within climate change.

3° **Apr. 8th to 1th**	4.3 Impacts and opportunities of climate change and the synergy between mitigation and adaptation. 4.4 International relevant policies. 5.1 Peruvian policies and laws approach to sustainable development a. Peruvian CO2 reports (NDCs) b. Market based incentives for biodiversity protection c. International policies approach for biodiversity protection d. Peruvian approach on biodiversity protection	- Lecture - 2nd Presentation in Class: Based on the following documentaries: Context: Land deals in Peru - The big sell-out | https://youtu.be/J3ddnPiuHtA Along the Amazon in Peru | DW Documentary **https://youtu.be/Xaj1Gj7oXFM?si=hLkaJnkevgB1brAL** **Analyse:** Identify territory's aspects, and answer Which one do you think is not recognize as important? Has territorial governance been considered? Which stakeholders you will need to manage for territorial development?
	Adams, V. M., Álvarez-Romero, J. G., Capon, S. J., Crowley, G. M., Dale, A. P., Kennard, M. J.,Pressey, R. L. (2017). Making time for space: The critical role of spatial planning in adapting natural resource management to climate change. Environmental Science and Policy, 74 (May), 57–67. https://doi.org/10.1016/j.envsci.2017.05.003. Peru. Inventario Nacional de Gases de Efecto Invernadero del Año 2016 y Actualización de las Estimaciones de los Años 2000, 2005, 2010, 2012 y 2014. Peru. National Communication (NC). NC 1. Peru. National Communication (NC). NC 2. Peru. National Communication (NC). NC 3. Peru First NDC (Archived) Peru First NDC (Updated submission) Peru. Biennial update report (BUR). BUR 2. National inventory report. Peru. Biennial update report (BUR). BUR 2. National inventory report. https://unfccc.int/reports?f%5B0%5D=corporate_author%3A113	
LEARNING UNIT III: INSTRUMENTS FOR SPATIAL PLANNING **LEARNING RESULTS:** 5. Identify and evaluate Peruvian spatial planning integrated policies and regulations. 6. Identify and analyze the process and components to drawing up the EEZ and its tools to prioritized options in SPs. 7. Identify and analyze the process and components to drawing up the Specialized Studies and its tools to prioritized options in SPs. 8. Identify and analyze the process and components to drawing up the Specialized Studies and its tools to prioritized options in SPs.		
4° **Apr. 15th to 20th**	6.1 The context of public policies and laws regarding spatial planning 6.2 Peru's spatial planning policy objectives 6.3 Progress achieved on Peruvian regions	- Lecture - 2nd Quiz: SDG, and Climate Change linkage with Spatial Planning

		- Hand-In 2nd Practice Case report: Identify the relationship between the sustainable development goals' targets and spatial planning processes. Select one of the following documentaries: 1. Climate change in Romania https://www.youtube.com/watch?v=ir4DgZFTbuY 2. Safeguarding the rainforests - The future of palm oil https://youtu.be/T0vuDvEASO0?si=fyMsoHGNlkis72Bl 3. Drought and floods — the climate exodus https://www.youtube.com/watch?v=PjyX5dnhaMw - 2nd Presentation: Present findings of 2nd Case Report
	Ministerio del Ambiente. (2016). Instrumentos Técnico Normativos del Ordenamiento Territorial. Lima: Ministerio del Ambiente.	
5° **Apr. 22nd to 27th**	7.1 Peru's Spatial Planning tools 8.1 National Policy framework, processes and tools for drawing up an Ecological and Economic Zoning-EEZ.	- Lectures - 2nd Forum: Context: Documentary "Before the Flood" Question: Does climate change mitigation and adaption planning curtail economic development and well-being in developing countries?
	Primer Concejo de Ministros. Decreto Supremo N°087-2004-PCM: Aprueban el Reglamento de Zonificación Ecológica y Económica (ZEE) (2004). Peru: El Peruano.	
6° **Apr. 29th to May 4th**	National Policies framework, processes and tools for drawing up Specialized Studies – Part 1 i) Methodology and National Policies for Regional Economics Dynamic Analysis	- Lectures - Key national policies review
	Ministerio del Ambiente. Resolución Ministerial N° 156-2016-MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado de Dinámica Económica Regional (2016). Peru: El Peruano.	
LEARNING UNIT IV: TOOLS TO ESTABLISH PRIORITIES IN SPATIAL PLANS **LEARNING RESULTS:** 9. Identify and analyze the process and components to drawing up the Specialized Studies and its tools to prioritized options in SPs. 10. Apply theoretical knowledge and diagnostic techniques in a practical case. 11. Identify basic concepts related with Strategic Environmental Assessment and its drivers		
7° **May. 6rd to 11th**	ii) Risk Assessment and Climate Change Vulnerability Assessment. Risk assessment case study application	- Lectures - Key national policies review - Group Work - Practice Case selection.
	Ministerio del Ambiente. Resolución Ministerial N° 008-2016-MINAM: Procedimiento Técnico y Metodológico para la	

	Elaboración del Estudio Especializado de Evaluación de Riesgos de Desastres y Vulnerabilidad al Cambio Climático (2016). Peru: El Peruano. Seto, K. C., Dhakal, S., Bigio, A., Blanco, H., C., D. G., Dewar, D., … Ramaswami, A. (2014). Human Settlements, Infrastructure, and Spatial Planning. In O. Edenhofer, R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, … J. C. Minx (Eds.), Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (pp. 923–1000). Cambrige, United Kingdom and New York, NY, USA: University Press, Cambridge.	○ Select a protected area in Perú. The region must have a EEZ approved by MINAM 1. You will have to prepare four reports - Review of Geoservidor and CENEPRED platforms - Study Cases: - Generation of a landslide risk index map for Cuba using spatial multi-criteria evaluation
8° **May. 13rd to 18th**	**MIDTERM EXAMS**	
9° **May. 20th 25th**	iii) Land Coverage Changes and Land-Use Analysis. Case study application Ministerio del Ambiente. Resolución Ministerial N° 311-2015-MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado Servicios Ecosistémicos para el Ordenamiento Territorial (2015). Peru: El Peruano. Ministerio del Ambiente. Resolución Ministerial N° 081-2016 MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado de Análisis de los Cambios de la Cobertura y Uso de la Tierra (2016). Peru: El Peruano.	- Lectures - Key national policies review - Review of local specialized studies - Flipped Class asynchronous Activities a. Watch Key concepts regarding land-use and land-coverage changes video b. 1st Case: Land-use change within Amboseli National Park in Kenya https://youtu.be/MRNwDs18jCE c. Watch 2nd Case: Kenya Standard Gauge Railway (SGR) routed through Nairobi National Park https://youtu.be/4W0EJxBNwec d. Read: One-third of global protected land is under intense human pressure (3 pages) https://www.pichimahuida.info/Pichimahuida/access-rights_files/Jones_et_al_2018-One-thirdofglobalprotectedlandisunderintensehumanpressure.pdf e. Take a multiple-choice survey - 6 questions https://docs.google.com/forms/d/e/1FAIpQLSfJZUeJRmJj8UDr7Givxcj6pQ2c0b23j2tFyHRQJRP0Q7yqwQ/viewform?usp=sf_link f. Individual Work: Create a mind mapping diagram appointing

		causes and effects regarding land-use and land-coverage changes regarding Kenya's video cases. Propose 5 prioritized alternative measures, projects or activities that could be applied to improve PA current state - Synchronous Activities a. Work in pairs, share individual analysis and prepare a new mindmaping diagram and propose 2 most important activities, plans or projects that could be undertaken b. Present each group analysis and proposals c. Share ideas, and comments with your mates regarding our case analysis d. Respond the following questions e. https://quizizz.com/admin/quiz/621d6f08dee215001ed5924b
10° **May. 27th to Jun. 1st**	iv) Ecosystem Services Study v) Territorial Laws and Regulations Study – TLRS vi) Institutional Capacity Analysis vii) Marine and Coastal Habitat and Ecosystems Analysis. Ministerio del Ambiente. Resolución Ministerial N° 159-2015-MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado de Análisis de Capacidad Institucional (2015). Peru: El Peruano. Ministerio del Ambiente. Resolución Ministerial N° 147-2016-MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado Ecosistemas y Hábitat Marino Costero (2016). Peru: El Peruano Ministerio del Ambiente. Resolución Ministerial N° 136-2015-MINAM: Aprueban el documento denominado "Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado de Normativa y Políticas con Incidencia Territorial" (2015). Peru: El Peruano.	- Lectures - Hand-in 3rd Practice Case Report. - 3rd Test/Presentation - 2nd Group Work: Analysis of Lomas de Lúcumo case study (outskirts of Lima) to proceed with an inventory of potential dangers and a risk analysis. - Key national policies review
11° **Jun. 3rd to 8th**	10. Review a local case study for planning economic, environmental and social development 11. Identify basic concepts related with Strategic Environmental Assessment and its drivers	- Lectures - Review of key national policies - Study Cases: Generation of a landslide risk index map for Cuba using spatial multi-criteria evaluation.

	Noble, B., & Nwanekezie, K. (2017). Conceptualizing strategic environmental assessment: Principles, approaches and research directions. *Environmental Impact Assessment Review*, *62*, 165–173. https://doi.org/10.1016/j.eiar.2016.03.005	
LEARNING UNIT V: SPATIAL PLANNING, URBAN AND RURAL PLANNING 12. Understand Spatial, Regional and local Planning concepts applied to urban and rural settings and its drivers. 13. Recognize the sustainable urban and rural planning approaches.		
12° **Jun. 10th to 15th**	10.1 Urban and Rural planning at local and regional levels 10.2 Urban and Rural Sustainable Forms 10.3 Tools for Territorial Economic Development Planning - Territorial economic development (TED) and the potentiality approach, tools to develop TED strategies and for field observation Jabareen, Y. R. (2006). Sustainable urban forms: Their typologies, models, and concepts. Journal of Planning Education and Research, 26(1), 38–52. https://doi.org/10.1177/0739456X05285119 Paruelo, J., Jobbágy, E., Laterra, P., Dieguez, H., García, A., & Panizza, A. (2014). Ordenamiento territorial rural. https://doi.org/10.13140/2.1.4004.4320 Morales Barragan, F., & Jiménez López, F. (2018). Fundamentos del Enfoque Territorial en el Marco Lógico. In M. Aguiluz Ibargüen, A. Cetto Kramis, C. Hernández Alcántara, R. Mansilla Corona, A. Negrete Yankelevich, M. Sánchez Menchero, … M. Yerena Capistrá (Eds.), Fundamentos del Enfoque Territorial: actores, dimensiones, escalas espaciales y sus niveles (1ra ed., pp. 53–86). México CDMX: UN Autónoma de México, Centro de Investigaciones Interdisciplinarias en Ciencias y Humanidades.	- Lectures - 3rd Quiz Conceptualizing strategic environmental assessment: Principles, approaches and research directions - Hand-in and presentation of 2nd Group work report
LEARNING UNIT VI: SPATIAL PLANNING AND INFORMATION AND COMMUNICATION SYSTEMS 14. Recognizes the information and communication technology application for spatial planning. 15. Recognizes Smart Cities initiatives as strategic tool to develop Sustainable Cities.		
13° **Jun. 17th to 22rd**	11.1. Information and Communication Systems for Spatial Planning 12.1. Sustainable Smart Cities and Spatial Planning 12.2. Study Cases (examples) Pinto, N. N., Lancrenon, D., & Berchtold, M. (2014). The Use of ICT in Planning Practice: Contributions to an Effective Link between Real and Virtual Cities and Territories. In N. Pinto, J. Tenedório, A. Antunes, & J. Cladera (Eds.), Technologies for Urban and Spatial	- Lectures - Visit to Fab Lab to present an example of IoT apply to Smart City Application using unity software. - Study Cases: The #SmartME project: Internet of Things - 4th Quiz - Construction of a Spatial Planning system at city-level:

	Planning: Virtual Cities and Territories (pp. 14-28). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-4349-9.ch002 Sustainable Smart Cities and Spatial Planning Study Cases (examples) Batty, M. (2014). Deconstructing Smart Cities. In N. Pinto, J. Tenedório, A. Antunes, & J. Cladera (Eds.), Technologies for Urban and Spatial Planning: Virtual Cities and Territories (pp. 1-13). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-4349-9.ch001 Stratigea, A., Somarakis, G., & Panagiotopoulou, M. (2017). Spatial Data Management and Visualization Tools and Technologies for Enhancing Participatory e-Planning in Smart Cities. In Smart Cities in the Mediterranean. Coping with Sustainability Objectives in Small and Medium-sized Cities and Island Communities (pp. 31–57). https://doi.org/https://doi.org/10.1007/978-3-319-54558-5	Case study of "integration of multi-planning"
LEARNING UNIT VII: DRAWING UP A DIAGNOSIS FOR SPATIAL PLANNING 16. Apply theoretical and technical knowledge to analyze a spatial development selection, according to regulations and/or laws, and integrated with Urban, Zoning and other development Plans. 17. Compare and contrast methodologies implemented in other countries with Spatial Planning processes		
14° **Jun. 24th to 28th**	13.1 Peruvian case studies 14.1 International case studies (regional, provincial, coastal area) Centro Nacional de Planeamiento Estratégico. (2015). Plan de Desarrollo Territorial para la ZONA DEL HUALLAGA AL 2021. Lima. Morphet, J. (2011). Spatial planning in Europe, North America and Australia. In the RTPI Library Series (pp. 1–292). New York: Routledge.	- Lectures - Groups debate presentations and discussions
15º **Jul. 1st to 6th**	Workshop – Fab Lab Case Study Applications – Lomas de Lucumo Sensing and Monitoring Applications on Spatial Planning *Ramírez O., M., 2020. Covid-19, Ordenamiento Territorial Y Planificación Urbana En Latinoamérica. [online] ArchDaily Perú. Available at: <https://www.archdaily.pe/pe/940794/covid-19-ordenamiento-territorial-y-planificacion-urbana-en-latinoamerica> [Accessed 15 July 2020].* - Proyecto EbA Lomas	- Lectures - Groups debate presentations and discussions

	- Análisis de los aportes de la cogestión y turismo rural comunitario para el desarrollo económico local del centro poblado rural quebrada verde de Pachacamac - Lima, período 2015 - 2016" - Plan de Desarrollo Local Concertado de Lurín – PDLC 2017 – 2021 - Comunicación y redes en el desarrollo territorial del distrito de Pachacamac - Actualización del plan de desarrollo del distrito de Pachacamac 2004 - Plan integral de las cuencas Lurín – chilca	
16º **Jul. 8th to 13th**	**FINAL EXAMS**	

VIII. Bibliography

Basic References

- Economic Commission for Europe. (2008). Spatial planning: Key Instrument for Development and Effective Governance with Special Reference to Countries in Transition. Geneva, Switzerland, 1-12.

- Jabareen, Y. R. (2006). Sustainable urban forms: Their typologies, models, and concepts. Journal of Planning Education and Research, 26(1), 38–52. https://doi.org/10.1177/0739456X05285119

- Ministerio del Ambiente. (2016). Instrumentos Técnico Normativos del Ordenamiento Territorial. Lima: Ministerio del Ambiente

- Ministerio del Ambiente. Resolución Ministerial N° 136-2015-MINAM: Aprueban el documento denominado "Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado de Normativa y Políticas con Incidencia Territorial" (2015). Peru: El Peruano.

- Ministerio del Ambiente. Resolución Ministerial N° 156-2016-MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado de Dinámica Económica Regional (2016). Peru: El Peruano

- Ministerio del Ambiente. Resolución Ministerial N° 159-2015-MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado de Análisis de Capacidad Institucional (2015). Peru: El Peruano.

- Ministerio del Ambiente. Resolución Ministerial N° 311-2015-MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado Servicios Ecosistémicos para el Ordenamiento Territorial (2015). Peru: El Peruano.

- Ministerio del Ambiente. Resolución Ministerial N° 008-2016-MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio

Especializado de Evaluación de Riesgos de Desastres y Vulnerabilidad al Cambio Climático (2016). Peru: El Peruano.

- Ministerio del Ambiente. Resolución Ministerial N° 081-2016 MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado de Análisis de los Cambios de la Cobertura y Uso de la Tierra (2016). Peru: El Peruano.

- Ministerio del Ambiente. Resolución Ministerial N° 147-2016-MINAM: Procedimiento Técnico y Metodológico para la Elaboración del Estudio Especializado Ecosistemas y Hábitat Marino Costero (2016). Peru: El Peruano.
- Morales Barragan, F., & Jiménez López, F. (2018). Fundamentos del Enfoque Territorial en el Marco Lógico. In M. Aguiluz Ibargüen, A. Cetto Kramis, C. Hernández Alcántara, R. Mansilla Corona, A. Negrete Yankelevich, M. Sánchez Menchero, M. Yerena Capistrá (Eds.), Fundamentos del Enfoque Territorial: actores, dimensiones, escalas espaciales y sus niveles (1ra ed., pp. 53–86). México CDMX: Universidad Nacional Autónoma de México, Centro de Investigaciones Interdisciplinarias en Ciencias y Humanidades.

- Morphet, J. (2011). Spatial planning in Europe, North America and Australia. In The RTPI Library Series (pp. 1–292). New York: Routledge.

- Noble, B., & Nwanekezie, K. (2017). Conceptualizing strategic environmental assessment: Principles, approaches and research directions. *Environmental Impact Assessment Review*, *62*, 165–173. https://doi.org/10.1016/j.eiar.2016.03.005

- Paruelo, J., Jobbágy, E., Laterra, P., Dieguez, H., García, A., & Panizza, A. (2014). Ordenamiento territorial rural. https://doi.org/10.13140/2.1.4004.4320

- Pinto, N. N., Tenedório, J. A., Antunes, A. P., & Cladera, J. R. (2014). Technologies for Urban and Spatial Planning: Virtual Cities and Territories (pp. 1-349). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-4349-9

- Primer Concejo de Ministros. Decreto Supremo N°087-2004-PCM: Aprueban el Reglamento de Zonificación Ecológica y Económica (ZEE) (2004). Peru: El Peruano.

- Seto, K. C., Dhakal, S., Bigio, A., Blanco, H., C., D. G., Dewar, D., … Ramaswami, A. (2014). Human Settlements, Infrastructure, and Spatial Planning. In O. Edenhofer, R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, … J. C. Minx (Eds.), Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (pp. 923–1000). Cambrige, United Kingdom and New York, NY, USA: University Press, Cambridge.

- Wang, L. (2019). Spatial Planning and Governance: Literature Review. In Changing Spatial Elements in Chinese Socio-economic Five-year Plan: from Project Layout to Spatial Planning (1st ed., pp. 7–44). Beijing: Science Press, Springer Nature Singapore. https://doi.org/10.1007/978-981-13-1867-2

- Wassenhoven, L. C. (2019). Introduction, Historical Periods and Examples. In The Ancestry of Regional Spatial Planning: A Planner's Look at History (pp. 7–44). Athens: Springer Nature Switzerland AG.

- Wilson, E., & Piper, J. (2010). Spatial planning, climate change and sustainable development. In J. Glasson (Ed.), Spatial Planning and Climate Change (1st ed., pp. 3–17). New York: Routledge.

Complementary References

- Abella, E. A. C., & Van Westen, C. J. (2007). Generation of a landslide risk index map for Cuba using spatial multi-criteria evaluation. Landslides, 4(4), 311–325. https://doi.org/10.1007/s10346-007-0087-y
- Acuto, F. (2005). The Materiality of Inka Domination: Landscape, Spectacle, Memory, and Ancestors. In Global Archaeological Theory (pp. 211–235). Boston: Springer, Boston, MA. https://doi.org/https://doi.org/10.1007/0-306-48652-0_14

- Adams, V. M., Álvarez-romero, J. G., Capon, S. J., Crowley, G. M., Dale, A. P., Kennard, M. J.,Pressey, R. L. (2017). Making time for space: The critical role of spatial planning in adapting natural resource management to climate change. Environmental Science and Policy, 74(May), 57–67. https://doi.org/10.1016/j.envsci.2017.05.003

- Albrechts, L. (2004). Strategic (spatial) planning re-examined. *Environment and Planning B: Planning and Design*, *31*(5), 743–758. https://doi.org/10.1068/b3065

- Alconini, S., & Malpass, M. A. (2010). Toward a Better Understanding of Inka Provincialism. In S. Alconini & M. A. Malpass (Eds.), Distant Provinces in the Inka Empire (pp. 279–299). Iowa: University of Iowa Press.

- Batty, M. (2014). Deconstructing Smart Cities. In N. Pinto, J. Tenedório, A. Antunes, & J. Cladera (Eds.), Technologies for Urban and Spatial Planning: Virtual Cities and Territories (pp. 1-13). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-4349-9.ch001

- Castillo Butters, J. L. (2004). Moche Politics in the Jequetepeque Valley: A Case for Political Opportunism. Lima.

- Centro Nacional de Planeamiento Estratégico. (2015). Plan de Desarrollo Territorial para la ZONA DEL HUALLAGA AL 2021. Lima.

- Chepstow-Lusty, A.; Frogley, M.; Bauer, B.; Leng, M.; Boessenkool, K.; Caarcaillet, C.; Ali, A.; Gioda, A. 2009 Putting the rise of the Inca Empire within a climatic and land management context. Climate of the Past, 5 (3). 375-388.

- Congreso de la República. Ley N° 30754: Ley Marco Sobre Cambio Climático (2018). Perú: El Peruano.

- Davoudi, S., Crawford, J. & Mehmood, A. (2009). *Planning for Climate Change. Strategies for Mitigation and Adaptation for Spatial Planners. Earthscan*.

- Di Gregorio, A., & Jansen, L. J. M. (2005). Definitions. In Land Cover Classification System Classification concepts and user manual Software version (2) (Environmen). Rome: Food and Agriculture Organization of the United Nations. Retrieved from http://www.fao.org/3/y7220e/y7220e00.htm#Contents

- Dourojeanni, M. (2016) Existe planificación en el Perú? in: Sociedad Peruana de Derecho Ambiental (SPDA) Actualidad Ambiental, January 11. Available at http://www.actualidadambiental.pe/?p=34799 (accessed 11 December 2018).

- Enemark, S., Williamson, I., & Wallace, J. (2005). Building modern land administration systems in developed economies. Journal of Spatial Science, 50(2), 51–68. https://doi.org/10.1080/14498596.2005.9635049

- Paruelo, J., Jobbágy, E., Laterra, P., Dieguez, H., García, A., & Panizza, A. (2014). Ordenamiento territorial rural. https://doi.org/10.13140/2.1.4004.4320

- Jenkins, D. (2001). A Network Analysis of Inka Roads, Administrative Centers, and Storage Facilities. Etnohistory, 48(4), 655–687. https://doi.org/https://doi.org/10.1215/00141801-48-4-655

- Keatinge, R. W., & Day, K. C. (1973). Socio-Economic Organization of the Moche Valley, Peru, During the Chimu Occupation of Chan Chan. Journal of Anthropological Research, 29(4), 275–295.

- Longo Minnolo, A., Bruneo, D., Panarello, A., Giacobbe, M., Mulfari, D., Tapas, N., … Puliafito, A. (2018). An IoT service ecosystem for Smart Cities: The #SmartME project. Internet of Things, 5, 12–33. https://doi.org/10.1016/j.iot.2018.11.004

- Morphet, J. (2011). Spatial Planning and Governance: Literature Review. The RTPI Library Series. New York: Routledge.

- Noble, B., & Nwanekezie, K. (2017). Conceptualizing strategic environmental assessment: Principles, approaches and research directions. Environmental Impact Assessment Review, 62, 165–173. https://doi.org/10.1016/j.eiar.2016.03.005

- Paruelo, J., Jobbágy, E., Laterra, P., Dieguez, H., García, A., & Panizza, A. (2014). *Ordenamiento territorial rural*. https://doi.org/10.13140/2.1.4004.4320

- Ponce, C. (2020). Intra-seasonal climate variability and crop diversification strategies in the Peruvian Andes: A word of caution on the sustainability of adaptation to climate change. World Development, 127. https://doi.org/10.1016/j.worlddev.2019.104740

- Stratigea, A., Somarakis, G., & Panagiotopoulou, M. (2017). Smart Cities in the Mediterranean. Coping with Sustainability Objectives in Small and Medium-sized Cities and Island Communities. https://doi.org/https://doi.org/10.1007/978-3-319-54558-5

- Van der Molen, P. (2004). Good administration of land in Europe. In *Proceedings of the UN - FIG and PC IDEA interregional special forum: The development of land information policy in the Americas, Aguascalientes Mexico,*

26-27 October 2004. 14 p. Aguascalientes, Mexico: International Federation of Surveyors (FIG).

- Wernke, S. A. (2006). The Politics of Community and Inka Statecraft in the Colca Valley, Peru. Latin American Antiquity, 17(2), 177–208.

- Wilson, E & Piper, J (2010). *Spatial planning and climate change (The natural and built environment). Routledge.*

- Zhou, X., Lu, X., Lian, H., Chen, Y., & Wu, Y. (2017). Construction of a Spatial Planning system at city-level: Case study of "integration of multi-planning" in Yulin City, China. Habitat International, 65, 32–48. https://doi.org/10.1016/j.habitatint.2017.04.015

Digital Platforms and Eucational Tools
Video Plataforms: Mentimeter y Kahoot.

IX. Laboratory Support

- Programa Mendeley
- Web browser
- Ilwis
- QGis

X. Lecturer

Carrión Puelles Naldi ncarrion@esan.edu.pe