# DEPARTMENT OF CITY AND REGIONAL PLANNING

University of North Carolina at Chapel Hill

**PLAN 741 Land Use and Environmental Planning, Spring 2022**

Tuesday/Thursday, 11am - 12:15pm

In person meeting room: Dey Hall, Rm 0306

In case of remote class sessions: zoom meeting link: https://unc.zoom.us/s/5530809614

Instructor: Yan Song [ys@email.unc.edu](mailto:ys@email.unc.edu)

Office Hours: Thur. 1:00pm – 3:00pm via zoom, or by appointment

**COURSE OBJECTIVES**

IMAGINE … as a land use planner and your planning director called on you and instructed: “I want us to create a first class land use plan. It should meet the highest standards of the profession, yet be feasible for us to formulate and implement with our limited resources. We must have the commitment of the city council and all-important stakeholders to the plan when we finish, so that we can implement it; thus the process must be participatory from the start. I want you to tell me in detail how to go about creating such a plan, and then I want you to be in charge of our community effort to do it. Can you do that?”

You reply, “I certainly can. I know what constitutes a good plan. I know the principles of good plan making. I know where to start, and the specific steps to take, the information needs that must be met, the key people to get involved, and how to choose methods to fit our situation. I have the skills to apply what I know and facilitate the creation of the plan as a community-wide process.”

That scenario incorporates your objectives in this course. By the end of this course, you should be able to

* articulate a clear vision of what constitutes an effective local land use plan
* specify the components of a complete land use planning program
* develop a dependable sense of judgment for assessing the validity, effectiveness, feasibility, strengths and weaknesses of various land use plan-making methods and plan formats
* formulate a plan in a professional manner, appropriate to the community context

More specifically, we will be learning analysis and syntheses skills; oral, graphic, and written communication skills; skills for working effectively as a member of a planning team and with community stakeholders. We will be learning the following:

* how to assess and define different community values;
* how to describe and assess existing and emerging community conditions;
* how to formulate goals;
* how to translate projections of economic and population change into their land use implications for land, location, and community services;
* how to determine the suitability of land and locations for various land uses;
* how to apply computer technology to specific plan-making tasks such as map presentations, land suitability analyses, and the drawing of plans;
* how to design a future urban regional form that meets the community’s objectives, accommodates the future population and economy, and incorporates community aspirations for a quality of life; and
* how to outline a development management program that will bring about such a future.

We will be using a "cooperative learning strategy." In that strategy, you work in teams of **five** students. The instructors will assign students to teams, utilizing student input. You will remain with your plan-making/learning team through the semester. Many class meetings, in the whole or in part, will be devoted to working in these groups and to presenting and discussing team products. We would like you to develop a sense during these exercises that you are responsible for one another's mastery of the course content, as well as your own understanding. You will be provided guidelines for working in planning/learning teams. Instructors will address team work issues from time to time during the semester and, if necessary, will initiate a program to monitor and assist students in developing skills and techniques for working in groups.

We are emphasizing this cooperative learning and application exercise approach for two reasons. First, the course is aimed at "higher order" skills such as application of methods, evaluation of plans and other products, synthesis of information and values, and creation of plans, rather than mastery of facts or theories. Secondly, public sector planning practice typically involves working in groups to define issues, solve problems, or make plans; this is a good place to begin developing the skills you need for professional practice.

**COURSE READINGS**

We provide all readings with downloaded copies on Sakai. The text for this course is the fifth edition of *Urban Land Use Planning* by Berke, Godschalk, Kaiser and Rodriguez, referred to as *ULUP-5* in the assigned readings below. Updated chapters will be provided throughout the semester. Other readings are indicated in the syllabus.

**Honor Code**

The Honor Code of the University of North Carolina at Chapel Hill states: “It shall be the responsibility of every student at the University of North Carolina at Chapel Hill to obey and to support the enforcement of the honor code, which prohibits lying, cheating, or stealing when these actions involve academic processes or University, student, or academic personnel acting in an official capacity.” For this course: (1) You are permitted and encouraged to seek advice and suggestions from other class members on the written assignments, unless specifically instructed otherwise. This may include exchanging drafts for feedback and/or proofreading. (2) In all written and presented work, you must cite or otherwise fully attribute all ideas, data, and other information that are not your own. This includes information presented in tables, graphs, appendices, etc.

**SCHEDULE OF CLASSES, READINGS AND ASSIGNMENTS**

The course is divided into seven modules:

I. Conceptualizing a model for land planning

II. Building a decision support system and preparing a state of the community report

III. Creating a Community Vision and Policy Framework

IV. Preparing an Area-wide Land Policy Plan

V. Creating a Community-wide Urban Land Use Design

VI. Making a Development Management Plan

VII. Bringing a Comprehensive Plan together

A description and schedule for each module follows below. Assignments are described at the end of the syllabus.

**PART I. CONCEPUTALIZING A MODEL FOR LAND PLANNING**

These sessions introduce fundamental concepts that shape a practitioner’s model of land use plan making. They include the emerging Smart Growth and Sustainable Development movements and other concepts of good urban form and process; the land planning and development "game"; principles of good plans; and concepts of participatory plan-making processes.

Jan 11 Remote zoom meeting link: <https://unc.zoom.us/s/5530809614>

Course outline, objectives, and requirements

Group formation, and please use the following document: <https://docs.google.com/spreadsheets/d/145pJtmQD3iI9pc6D19liBzFDL-uaX0nlDYW_jWvKWv0/edit?usp=sharing>

Jan 13 Remote zoom meeting link: <https://unc.zoom.us/s/5530809614>

Land Planning Visions: good urban form

Reading:

* Berke, Philip. 2008. “The Evolution of Green Community Planning, Scholarship, and Practice,” *Journal of the American Planning Association*, 74 (4): 393-407.
* Talen, Emily. 2011. “Sprawl Retrofit: Sustainable Urban Form in Unsustainable Places.” *Environment and Planning B: Planning and Design* 38 (6): 952–78.
* Fainstein, Susan S. 2018. “Resilience and justice: planning for New York City,” Urban Geography, 39 (8): 1268-1275.

**Group Writing Assignment 1: Core community values. Due on Jan 27.**

Jan 18 Remote zoom meeting link: <https://unc.zoom.us/s/5530809614>

Land planning process – public participation

* Carissa Schively Slotterback & Mickey Lauria, 2019. “Building a Foundation for Public Engagement in Planning,” Journal of the American Planning Association, 85:3, 183-18.
* Greg Brown, Sara Sanders, Pat Reed, 2018. “Using public participatory mapping to inform general land use planning and zoning,” Landscape and Urban Planning, Volume 177: 64-74.
* Nader Afzalan & Brian Muller, 2018. “Online Participatory Technologies: Opportunities and Challenges for Enriching Participatory Planning,” Journal of the American Planning Association, 84:2, 162-177.

Jan 20 Remote zoom meeting link: <https://unc.zoom.us/s/5530809614>

Decision support systems for understanding an urban system and developing policy and plans; scenario building for “possible futures”; Understanding a state of the community report;

Reading:

* Zapata, Marisa A, and Nikhil Kaza. 2015. “Radical Uncertainty: Scenario Planning for Futures.” *Environment and Planning B: Planning and Design* 42 (4): 754–70.
* Kahila-Tani, Maarit, Anna Broberg, Marketta Kyttä, and Taylor Tyger. 2016. “Let the Citizens Map—Public Participation GIS as a Planning Support System in the Helsinki Master Plan Process.” *Planning Practice & Research* 31 (2): 195–214.
* ULUP-5, Chapter 9, “State of Community Report”

**Group Writing Assignment 2: Supporting system and land use planning. Due on February 3.**

**Group City Assignment 1: State of the Community Report. Due on February 8.**

**PART II. BUILDING A DECISION SUPPORT SYSTEM AND ANALYZING A STATE OF THE COMMUNITY REPORT**

The design, development, and effective use of an information system is a major responsibility of local planners and a necessary foundation for plan-making and many other functions performed by planning agencies. We will explore both technical and conceptual aspects of information systems designed to support local planning.

Students will read a selected plan and understand typical pre-plan analyses of current and emerging conditions to reveal issues to be addressed in a plan for a community. Planning teams will present their results in an oral presentation with a brief written report.

Jan 25 Population and Economic Information

Reading:

* Smith, Stanley K., and Stefan Rayer. 2015. “An Evaluation of Population Forecast Errors for Florida and Its Counties, 1980–2010.” In *Emerging Techniques in Applied Demography*, edited by M.Nazrul Hoque and Lloyd B. Potter, 11–24. Applied Demography Series. Dordrecht: Springer Netherlands.
* Morgan, M. Granger. 2018. “Uncertainty in Long-Run Forecasts of Quantities Such as per Capita Gross Domestic Product.” *Proceedings of the National Academy of Sciences* 115 (21): 5314–16.

Jan 27 Inventory and Classification of the Environment

Reading:

* Mcharg. 1992. *Design With Nature*. "A Response to Values." (Plan for the Valleys) pp. 79-93.
* Yang, Bo, and Shujuan Li. 2016. “Design with Nature: Ian McHarg’s Ecological Wisdom as Actionable and Practical Knowledge.” *Landscape and Urban Planning*, Ecological Wisdom for Urban Sustainability: Doing real and permanent good in ecological practice, 155 (November): 21–32.

Feb 1 Land supply, demand, and policy monitoring.

Reading:

* Moudon and Hubner (eds.) 2000. *Monitoring Land Supply with Geographic Information Systems.* University of Washington. Chs. 1 & 2, pp. 17-64.
* Liu, Ting, and Xiaojun Yang. 2015. “Monitoring Land Changes in an Urban Area Using Satellite Imagery, GIS and Landscape Metrics.” *Applied Geography* 56 (January): 42–54.

**Group Writing Assignment 3: Land supply and demand. Due on February 15.**

Feb 3 Land Use, Transportation, and Infrastructure

* *Land-Based Classification Standards: An update of the 1965 Standard Land Use Coding Manual for Describing, Classifying, and Sharing Data about Land Uses.* 2003. http//www.planning.org/LBCS, 2 pages
* Sanjay Jeer, with Barry Bain. “Traditional Color Coding for Land Uses,” APA, <http://www.planning.org/plnginfo/lbcs/index.html>. October 27, 2000
* Litman, Todd. n.d. “Considering the Impacts, Benefits and Costs of Different Land Use Development Patterns,” 72.

Feb 8 **Students present Group City Assignment 1: State of the Community Report.**

**PART III. CREATING A COMMUNITY VISION AND POLICY FRAMEWORK**

This section of the course covers various aspects of formulating a community vision and general policy framework, including (1) eliciting issues and opportunities, (2) community visioning, (3) setting goals and objectives, and (4) formulating land use development and environmental policies linked to the goals and objectives, and then integrating them into a “vision statement” and "policy framework" plan.

Students will review and discuss examples of visions, goals and objectives, and policies in a sample of plans.

Feb 10 Visioning and scenario building; Formulating a policy framework

Reading:

* ULUP-5, Introduction to Part III, "Overview of Making Land Use Plans (see ch. 9)," and Chapter 10, "The Plan-making Process," pp. 291-300
* Quay, Ray. 2010. “Anticipatory governance: A tool for climate change adaptation.” Journal of American Planning Association, Vol. 76, No. 4

**Group City Assignment 2: Visioning and Policy Framework. Due on Feb 17.**

Feb 15The good plan: toward enduring principles of good land use planning.

Reading:

* Kaiser and Godschalk, 1995. "Twentieth Century Land Use Planning: A Stalwart Family Tree," *Journal of the American Planning Association*, 61:3, 365-385 (for those students who haven’t taken PLAN 740).
* Bunnell, Gene, and Edward J. Jepson Jr. 2011. “The Effect of Mandated Planning on Plan Quality.” *Journal of the American Planning Association* 77 (4): 338–53.
* Ward Lyles, Mark Stevens, 2014. “Plan Quality Evaluation 1994–2012: Growth and Contributions, Limitations, and New Directions.” Journal of Planning Education and Research, 344: 433-450.

**Feb 17** **Students present Group City Assignment 2: Visioning and Policy Framework**

**PART IV. PREPARING AN AREA-WIDE LAND POLICY PLAN**

This section of the course covers methods and techniques for designing a type of land use plan, called a mapped land policy plan or land classification plan. Plans of this type are especially appropriate for counties and multi-county regions, but they are also used by municipalities and could be a part of a scenario planning approach.

Feb 22 Introduction to Part IV. Overview of the process of designing a mapped areawide land policy plan;

Reading:

* ULUP-5; Ch. 10, "The Plan-making Process," pp. 300-313 and Ch 11, "The Areawide Land Policy Plan" read the sections on "the overall process, pp. 315-324," "delineating policy districts for urban growth, pp. 334-343" and "bringing it all together, pp. 343-346."
* Duany, A., & Talen, E. 2002. “Transect planning.” Journal of the American Planning Association, 68(3), 245-266.

**Group Writing Assignment 4: Areawide land policy districts. Due on March 8.**

Feb 24 Suitability Analysis

Reading:

* Steiner. 2000. *The Living Landscape, 2nd Edition*. "Suitability Analysis." Ch. 5; pp. 187-228

Website for Steiner: http://books.google.com/books?id=h7jdhL\_ns7EC&printsec=frontcover&cd=1&source=gbs\_ViewAPI#v=onepage&q&f=false

* Steiner. 2000. *The Living Landscape*. "Two Examples of Biophysical Inventory and Analysis," pp. 122-140; "Landscape Plans", pp. 176-186; "Detailed Designs," pp. 219-228.

Website for Steiner: <http://books.google.com/books?id=h7jdhL_ns7EC&printsec=frontcover&cd=1&source=gbs_ViewAPI#v=onepage&q&f=false>

Mar 1 Determining location and space requirements

**PART V. CREATING A COMMUNITY-WIDE URBAN LAND USE DESIGN**

In contrast to the area-wide (regional scale)land policy plan, the community-wide urban land use/transportation design approach is more explicit in visualizing future urban form and more detailed in specifying locations and calculating space requirements. It also goes further in integrating transportation into the land use plan.

Mar 3 Overview of urban land use design and its incorporation of transportation and possibly scenarios;

Siting commercial and employment centers and assessing land requirements for them.

Reading:

* ULUP-5, review Introduction to Part III and Chapter 10, "The Plan-making Process," pp. 291-300, Chap. 12, "Commercial and Employment Centers."

**Group Writing Assignment 5: Land use design. Due on March 22.**

**Group City Assignment 3: Areawide districts and land use design. Due on March 24.**

Mar 8 Planning residential habitats.

Reading:

* ULUP-5, Chapter 13, "Residential Areas," re-read Chapter 8, "Transportation and Infrastructure Systems."
* Duany, Andres, and Elizabeth Plater-Zyberk, "The Neighborhood, the District, and the Corridor," pp. xvii-xx
* Mike Biddulph. 2010. “Evaluating the English Home Zone Initiatives.” Journal of the American Planning Association, Spring 2010, Vol. 76, No. 2.

Mar 10 Small area plans

Reading:

* ULUP-5, Chapter 14, “Small-area Plans”

Mar 15 and 17 No Class, Spring Break

Mar 22 Work session on land use design

**Mar 24** **Students present Group City Assignment 3: Areawide districts and land use design.**

**PART VI. MAKING A DEVELOPMENT MANAGEMENT PLAN**

The development management element is a program of actions to implement the vision statement/policy framework, area-wide land policy plan, and community urban land use/transportation design.

Mar 29 Zoning and Flexible Zoning, part 1

Readings:

* Schuetz, Jenny, Genevieve Giuliano, and Eun Jin Shin. “Does Zoning Help or Hinder Transit-Oriented (Re)Development?” Urban Studies 55, no. 8 (June 1, 2018): 1672–89.
* Arendt, Randall. “Linked Landscapes: Creating Greenway Corridors through Conservation Subdivision Design Strategies in the Northeastern and Central United States.” Landscape and Urban Planning 68, no. 2–3 (2004): 241–69.
* Atkinson-Palombo, Carol. “Comparing the Capitalisation Benefits of Light-Rail Transit and Overlay Zoning for Single-Family Houses and Condos by Neighbourhood Type in Metropolitan Phoenix, Arizona.” Urban Studies 47, no. 11 (October 1, 2010): 2409–26.
* LA Metro. “Incentives & Bonuses.” Accessed January 15, 2021. <https://www.metro.net/projects/tod-toolkit/incentives-bonuses/>.

**Group City Assignment 4: Tools of implementation. Due on April 19.**

Mar 31 Zoning and Flexible Zoning, part 2

Performance Zoning:

* Systematics, Cambridge. “Multimodal Transportation: Development of a Performance-Based Planning Process.” NCHRP Research Results Digest 226 (1999).

Form Based Code:

* Hananouchi, Robert, and Cornelius Nuworsoo. “Comparison of Parking Requirements in Zoning and Form-Based Codes.” Transportation Research Record 2187, no. 1 (2010): 138–45.

Apr 5 Smart city governance

Reading:

* Meijer, Albert, and Manuel Pedro Rodríguez Bolívar. 2016. “Governing the Smart City: A Review of the Literature on Smart Urban Governance.” *International Review of Administrative Sciences* 82 (2): 392–408.

**Group Writing Assignment 6: Technology and urban management. Due on April 19.**

Apr 7Community wide tools

Readings

Urban Growth Boundary: https://www.oregonmetro.gov/urban-growth-boundary

Smart Codes

* Duany, A., Sorlien, S., & Wright, W. (n.d.). SmartCode Version 9.2. Retrieved from Center for Applied Transect Studies: <http://www.transect.org/codes.html>
* Town of Ridgeland SmartCode. (2010). Retrieved from <https://www.ridgelandsc.gov/pdfs/ridgeland-zoning-ordinance.pdf>

Apr 12 Development rights and conservation

Readings:

Transfer/Purchase of Development Rights:

* Johnston, Robert A., and Mary E. Madison. “From Land Marks to Landscapes: A Review of Current Practices in the Transfer of Development Rights.” Journal of the American Planning Association 63, no. 3 (September 30, 1997): 365–78. <https://doi.org/10.1080/01944369708975929>.

Conservation Easements:

* Smith, Tyson, Tara D. Allden, and Ross Appel. Legal Aspects of Conservation Easements: A Primer for Transportation Agencies, 2013.

Apr 14 No class, Wellness Day

**Apr 19** **Students present Group City Assignment 4: Tools of implementation.**

**PART VII. PLAN EVALUATION AND PRESENTATION & COURSE SUMMARY**

In this section of the course, we will discuss the inclusion of a plan monitoring, evaluation, and updating program.

We will also demonstrate how planning teams compile their complete plans and present them to the planning review board to engage elected officials, citizens, and planners in a discussion of the strengths and weaknesses of a plan; and to represent and respond to interests of specific stakeholders as well as general public interests. We also want to appreciate how the interests of many community groups conflict with each other and with general public interests, and how stakeholder interests are affected by a land use plan.

Apr 21 Examples of plan evaluation and monitoring

**Group City Assignment 5: Final compilation of Group and Writing Assignments. Due on April 29.**

Apr 26 Course summary and review, and a look ahead to land use planning in the next decade; student course evaluations and suggestions for improvements to the course.

**GRADING**

The course grade will be determined by performance on exercises and by general course participation. The relative weights for grading purposes are as follows:

(7%) Group Writing Assignment 1: Core community values.

(7%) Group Writing Assignment 2: Supporting system and land use planning.

(7%) Group Writing Assignment 3: Land supply and demand.

(7%) Group Writing Assignment 4: Areawide land policy districts.

(7%) Group Writing Assignment 5: Land use design.

(7%) Group Writing Assignment 6: Technology and urban management.

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(7%) Group City Assignment 1: State of the Community Report.

(7%) Group City Assignment 2: Visioning and Policy Framework

(18%) Group City Assignment 3: Areawide districts and land use design.

(12%) Group City Assignment 4: Tools of implementation.

(7%) Group City Assignment 5: Final compilation of assignments.

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(7%) Participation: Including miscellaneous exercises, general classroom participation, and class-room simulations, such as public hearings.

The assignments are very important and will require considerable time outside of class. Be sure to get started immediately after an assignment is introduced. The assignments will be specified in full detail as they are assigned during the course of the semester.