



## **URBDP 424/524 SITE PLANNING: ISSUES AND TECHNIQUES**

Autumn 2021

**Lecture:** Mondays and Wednesdays | 8:30 - 9:50 am

**Instructor :** Dan Abramson (PhD, Associate Professor)

### **COURSE OVERVIEW AND OBJECTIVES**

URBDP 424/524 provides students with an overview of site planning as both a design activity and also as a nexus of principles and issues that are central to urban planning and its allied professions, including architecture, landscape architecture, civil engineering and real estate. The course is informed by the working definition of site planning phrased by Kevin Lynch and Gary Hack: the practical, moral and aesthetic “art of arranging structures on the land and shaping the spaces between” (Site Planning, 1984, p.1).

Course lectures, readings, and discussion address the basic techniques and norms of good physical design as well as critical issues, regulations and policy, and their place in the historical evolution of approaches to site layout, from the early days of the industrial revolution through the advent of the automobile, the rise of “New” Urbanism, and current renewed movements for ecological performance, health/well-being, and social and racial equity, diversity and inclusion. The assignments familiarize students with key tasks of site planning: site observation and analysis; basic topographical and hydrological analysis and manipulation; property subdivision; residential, mixed-use and shopping center layout; laying out roadways, parking, and pedestrian circulation; and finally site furnishing, lighting, planting and paving. More advanced students will also have an opportunity to apply specialized knowledge in areas of particular interest to them. Lectures and readings will also include enough historical background and cases of innovative practice to inform critical thinking about current conventions and the application of technique.

### **GRADING**

Student performance will be graded as follows:

**Participation** in class or Canvas online discussion and in-class exercises: 10%.

**Assignment #1.** Site Analysis: 15%

**Assignment #2/Quiz.** Subdivision Revision/Markup: 10%

**Assignment #3.** Site and Housing Typology Study: 10%

**Assignment #4.** Residential Cluster Plan: 15%

**Assignment #5.** Commercial Site Layout: 15%

**Final Assignment:** 25%. URBDP 424 students must revise Assignment #1, the Site Analysis. Under special circumstances, with the instructor's approval, they may instead revise Assignment #5 or #6. URBDP 524 students who are taking the course for the Urban Design Certificate or MUP Urban Design Specialization must both revise and add further detail to either Assignment #4 or #5, e.g. revise it

according to the instructor's comments as well as design a grading and drainage layer, or include detailed site furnishings, lighting and landscape for a portion of it. Other URBDP 524 students must revise Assignment #1, #4 or #5, and conduct a basic traffic impact (trip-generation and -distribution) analysis, a financial analysis, environmental/health/climate impact assessment, or other analysis suited to their specialization.

## FORMAT

Class sessions will be based on a series of lectures, with some time given to presentation and discussion of the readings and assignments. Most assignments will be take-home and will require students to visit off-campus sites on their own time, but some amount of class time will also be put aside for students to work together on assignments, with coaching from the instructor. One or two class field trips involving extra time outside of the normal class time may also be scheduled.

**Materials needed:** sketch/notebook; camera; engineering scale ruler showing 1"=20', 1"=40', 1"=100', etc.; protractor; drawing pens and pencils (of your choice, but a fine and a medium felt-tip black marker, and a small selection of colored pencils is recommended); tracing paper (either 11"x17" sheets from a tablet, or cut neatly from an 11" roll of tracing paper). Also, students are expected to obtain base maps, GIS data and aerial photographs normally available online.

Students are expected to use and develop hand sketching and note-taking ability, both in-class and for field observation and incorporation in assignment submissions. Use of digital modeling, analysis, and presentation tools (ArcMap, SketchUp, etc.) is encouraged for homework assignments, but is not necessary as long as manual work is clear and can be uploaded to Canvas in a digital (e.g. scanned) format. The basic clarity of line drawing (e.g. as afforded by the use of variable line weights, and with dimensions that measure consistently at a given scale), is more important than whether work is hand-drawn or digitally drawn.

**Readings** are listed below, and are also indicated next to each topic in the syllabus schedule to which they relate. Key readings are available electronically on the course Canvas website, or in the primary texts for the course (see below). The readings are offered as a resource for you to read selectively, as an aid and reference to doing the assignments and understanding the related issues. Materials marked with an asterisk (\*) should be read before the class session for which they are listed, in order to best participate in class discussion and in class-time exercises. Other readings are mainly references for doing assignments outside of class-time.

The primary required texts for this course have been ordered through the University Bookstore:

- For URBDP 424 and 524: Kevin Lynch and Gary Hack, *Site Planning*, 3<sup>rd</sup> Edition (Cambridge, MA: MIT Press, 1984).
- For URBDP 524: Gary Hack, *Site Planning: International Practice* (Cambridge, MA: MIT Press, 2018). It is also available to rent as an eTextbook directly from MIT Press at <https://mitpress.ubliish.com/book/site-planning#purchase>.

Students taking the course for graduate-level credit (URBDP 524) should also refer frequently to:

- Thomas H. Russ, *Site planning and design handbook* (New York: McGraw-Hill, 2002). This book has a more thorough approach to technical specifications. The Canvas online readings and

reserves (both on the shelf and electronic) include chapters from the 1<sup>st</sup> edition (2002), which is similar enough for all but the most technical of purposes. The entire book is available temporarily from HathiTrust at <https://babel.hathitrust.org/cgi/pt?id=mdp.39015060039958>

Also, for useful technical definitions, see Appendix A in James LaGro's *Site Analysis: Informing Context-Sensitive and Sustainable Site Planning and Design* (2013), available as an e-book through UW Libraries.

## RESOURCES

**Materials on reserve in the Built Environments Library, Gould Hall** (not including materials in Canvas, some of which are also on reserve, see next page)

- Alexander, Christopher et al. *A pattern language: towns, buildings, construction* (New York : Oxford University Press, 1977). HT166.A6147
- Alexander, Ernest R. and K. D. Reed. *Density measures and their relation to urban form*. HT110 .A54 1988
- Alternative Development Standards for Sustainable Communities: Design Workbook*. AURES PC
- Arendt, Randall G. *Conservation design for subdivisions: a practical guide to creating open space networks* (Washington, D.C.: Island Press, 1996). HD1390.2.A73 1996
- Balmori, Diana, and Gaboury Benoit. *Land and Natural Development (LAND) Code: Guidelines for Sustainable Land Development* (Hoboken, NJ: John Wiley & Sons, 2007). HD255.B34 2007
- Bookout, Lloyd W. *Value by design: landscape, site planning, and amenities* (Washington, D.C. : Urban Land Institute, 1994). SB472.45.B66 1994
- Burden, Dan. *Street design guidelines for healthy neighborhoods* (Sacramento, CA: Center for Livable Communities, [1999]). TE279.B87 1999
- Campoli, Julie and Alex MacLean. *Visualizing Density* (Cambridge, MA: Lincoln Institute of Land Policy, 2007). HB1965 .C25 2007 (book and disc).
- Davis, Sam, ed. *The Form of housing* (New York : Van Nostrand Reinhold, [1977]). HD7293.F63
- De Chiara, Joseph. *Site planning standards* (New York : McGraw-Hill, 1978; 1984). NA2540.D4 (Reference Section)
- Fader, Steven. *Density by design: new directions in residential development* (Washington, D.C.: ULI, Urban Land Institute, 2000). NA7205.D44 2000
- Girling, Cynthia and Ronald Kellet. *Skinny Streets and Green Neighborhoods: Design for Environment and Community* (Washington, D.C.: Island Press, 2005). HT167.G57 2005
- Gary Hack, *Site Planning: International Practice* (Cambridge, MA: MIT Press, 2018). NA2540.5.H33 2018
- Jarvis, Frederick D. *Site planning and community design for great neighborhoods*. HD259.J37 1993
- Kulash, Walter M. *Residential streets* (Washington, D.C.: ULI, the Urban Land Institute, 2001). TE279.K85 2001
- LaGro, James A. *Site Analysis: Informing Context-Sensitive and Sustainable Site Planning and Design*. Hoboken: Wiley, 2013). UW Libraries e-book.
- Listokin, David and Carole Walker. *The subdivision and site plan handbook* (New Brunswick, N.J.: Rutgers, State University of New Jersey, Ctr. for Urban Policy Research, 1989). KF5698.L57 1989
- Lynch, Kevin and Gary Hack, *Site Planning*, 3<sup>rd</sup> Ed. (Cambridge, MA: MIT Press, 1984). NA9030.L9 1984
- Marcus, Clare Cooper and Wendy Sarkissian. *Housing as if people mattered: site design guidelines for medium-density family housing* (Berkeley: Univ. of Calif. Press, 1986). NA7115.M27 1986
- Marshall, Stephen. *Streets & Patterns* (London; New York: Spon Press, 2005). NA 9053.S7.M37.2005.
- NAHB. *Land development* (Washington, D.C.: National Assoc. of Home Builders, 1987). TD163.L36 1987
- Newman, Oscar. *Community of Interest*. 1st ed. (Garden City, N.Y.: Anchor Press/Doubleday, 1980). HN90.C6 N49

Pyatok, M. *Designing for density: ideas for more compact housing and communities*. NA9051.4.D48 1992

Rubenstein, Harvey M. *A guide to site planning and landscape construction* (New York: John Wiley, 1996). NA2540.5.R83 1996

Schueler, T. R. *Site planning for urban stream protection* (Wash., DC: Metropolitan Washington Council of Governments; Silver Spring, MD: Center for Watershed Protection, 1995). TD365.S34 1995

Southworth, Michael and Eran Ben-Joseph. *Streets and the shaping of towns and cities* (New York: McGraw-Hill, 1997). TE279.S58 1997

Untermann, Richard K. *Principles and practices of grading, drainage, and road alignment: an ecologic approach* (Reston, Va.: Reston Pub. Co., 1978). TE145.U62

Untermann, Richard K. and Robert Small. *Site Planning for Cluster Housing* (New York: Van Nostrand Reinhold, 1977). NA9051.4.U57

White, Edward T. *Site analysis: diagramming information for architectural design* (Tucson, Arizona: Architectural Media, 1983). NA2540.5.W55 1983

**Canvas Online Readings** (items that are also available on reserve separately have call numbers)

Calthorpe, Peter. "Pedestrian Pockets" in *Whole Earth Review*, Spring 1988, pp.118-123.

Clausen, Meredith L., "Northgate Regional Shopping Center – Paradigm From the Provinces," *Journal of the Society of Architectural Historians* Vol. 18 No. 2 (May 1984), pp. 144-161.

Chrest, Anthony P. *Parking structures: planning, design, construction, maintenance, and repair* (Boston: Kluwer Academic Publishers, 2001). [TL175 .C48 2001](#)

Gladwell, Malcolm. "The Terrazzo Jungle." *The New Yorker* (March 15, 2004), pp. 120-127.

*Greenwood Avenue Cottages* and permitting materials, and *Cottage Housing Ordinance Preliminary Proposal* (2 April 2002)

"Integration of a Neighborhood Mall," *Canadian Architect* (July 1985), pp. 32-33.

Nico Larco (2009) Untapped density: site design and the proliferation of suburban multifamily housing, *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 2:2, 167-186.

Lennertz, William & Laurence Qamar. *Principles of a Balanced Transportation Network: Implementing the Oregon Transportation Planning Rule* ("funded through a contract with the Oregon Department of Land Conservation and Development", c.1998) AURES PC

Moudon, Anne Vernez. "The Evolution of Twentieth-Century Residential Forms: An American Case Study," in Whitehand and Larkham, eds., *Urban Landscapes: International Perspectives* (London; New York: Routledge, 1992), pp. 170-206. [NA9095 .U74 1992](#)

Newman, Oscar. *Design Guidelines for Creating Defensible Space* (1975)

Puget Sound Partnership and WSU Pierce County Extension, *Low Impact Development: Technical Guidance Manual for Puget Sound* (2012)  
[https://www.psp.wa.gov/downloads/LID/20121221\\_LIDmanual\\_FINAL\\_secure.pdf](https://www.psp.wa.gov/downloads/LID/20121221_LIDmanual_FINAL_secure.pdf)

"Reviving Dead Malls," *New Urban News* (January-February 2000).

Robinette, Gary O. *Parking lot landscape development* (Plano, TX.: Agora Communications, 1993). [TL175.R6 1993](#)

Rowe, Peter G. *Making a Middle Landscape* (Cambridge, Mass.: MIT Press, 1991), pp. 197-213. [HT352.U6 R68 1991](#)

Russ, Thomas. H. *Site planning and design handbook* (New York, McGraw-Hill, 2002), Chapters 6, 8 and 9, "Infrastructure," "Site Layout," and "Vegetation in the Site Plan." [NA2540.5 .R87 2002](#) (Reference Section)

Smith, Mary S. *Shared Parking* (Washington, D.C.: ULI, 2005). [HE336.P37 S52 2005](#)

Untermann, Richard K. *Grade easy; an introductory course in the principles and practices of grading and drainage* ([McLean, Va.] American Society of Landscape Architects Foundation [1973]) [SB476 .U57](#)

Urban Land Institute, and National Parking Association. *The Dimensions of Parking*. 4th ed. (Washington, DC: ULI; National Parking Association, 2000), Chapters 3-5, 7-9. [HE336.P37 D55 2000](#)

Valente, James R. and Leslie A. Oringer, "Retail's Evolving Footprint," *Urban Land*, July 1998, pp. 30-35, and other articles from that issue of *Urban Land* on trends in shopping center development. See especially, Lassar, Terry J. "Shopping in Seattle," pp. 42-45, 84, on University Village.

Walker Parking Consultants, Urban Land Institute, and International Council of Shopping Centers. *Parking Requirements for Shopping Centers: Summary Recommendations and Research Study Report*. 2nd ed. (Washington, DC: ULI, 1999), Chaps. 1-9; appendices. [HE336.P37 P37 1999](#)

### **Disability Resources**

If you have a disability (physical, learning, or psychological) that makes it difficult for you to carry out the coursework as outlined and/or requires accommodations, such as recruiting note-takers, readers, or extended time on assignments and exams, please contact me, or Disabled Student Services, within the first week of the quarter. DSS is available at 685-1511, or at [http://www.washington.edu/students/gencaf/front/Disabled\\_Student.html](http://www.washington.edu/students/gencaf/front/Disabled_Student.html), and will be able to provide you with information and review appropriate arrangements for reasonable accommodation.

### **Religious Accommodations**

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at [Religious Accommodations Policy](#) (<https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/>). Accommodations must be requested within the first two weeks of this course using the [Religious Accommodations Request form](#) (<https://registrar.washington.edu/students/religious-accommodations-request/>).

## SCHEDULE

Week	Day	Topic	References
1	W 9/30	INTRODUCTION - instructor and student interests and background - overview of course and syllabus - handout and discuss Assignment #1	
2	M 10/5	SITE ANALYSIS AND MAPPING - site inventory and evaluation - range and process of different types of site development and design - regulatory considerations - relation of program to design - importance of slope - learn to read a topographical map and relate it to natural systems	*Lynch & Hack, chaps.1,2,3 *Hack, Parts 1 and 2 Russ, pp.1-34 *LaGro, Section 1.5, and all of Part II Listoken & Walker, pp.189-195 *Untermann (in reader), pp.2-12 Untermann & Small, pp.21-35, 183-200 NAHB, <i>Land...</i> , chap.2 White Rubenstein, chaps.2,6
	W 10/7	SITE ANALYSIS CONTINUED - on-site reconnaissance and note-taking for site analysis	*Lynch & Hack, chaps.4,5,6 *Hack, Part 3
3	M 10/12	<b>Due online 8:00am:</b> Assignment #1a - Site Analysis (Part I)  Team work on Assignment #1b - Site Analysis (Part II)	
	W 10/14	DRAINAGE AND GRADING - moving earth and water given different slopes, soil types and ground cover - strategies for minimizing runoff and preserving natural vegetation and habitat - wastewater systems	*Hack, chaps. 25, 27, 32 *Lynch & Hack, chap.8, Appendix K Russ, chap. 6 (in reader) *Untermann (in reader), p.13ff Rubenstein, chaps.7,8 Schueler Untermann, "Principles..."
4	M 10/19	<b>Due online 8:00am:</b> Assignment #1b - Site Analysis (Part II)  PROPERTY SUBDIVISION AND ACCESS: ROAD AND INFRASTRUCTURE LAYOUT - basics of conventional subdivision layout - road intersection standards and horizontal and vertical alignment principles	*Lynch & Hack, pp.193-221, Appendix J Russ, Chap.8 *Listoken & Walker, pp.293-342 Rowe (in reader) Southworth & Ben-Joseph, chaps.1,2,3 Kulash, chaps.1,2,3,4 Rubenstein, chap.9
	W 10/21	PROPERTY SUBDIVISION AND ACCESS: ECOLOGICAL AND PEDESTRIAN-FRIENDLY DESIGN - shared/controlled access	*Hack, chap. 16 Burden *Girling and Kellett Arendt

- green infrastructure

Puget Sound Partnership  
Alternative Development Standards

<b>Week</b>	<b>Day</b>	<b>Topic</b>	<b>References</b>
5	M 10/26	<b>Due online 8:00am:</b> "Assignment" #2 – Subdivision Take-home Quiz  Handout and discuss Assignment #3, Site & Housing Typology Study  HOUSING, HOUSES AND COMMUNITIES: DENSITY, DIVERSITY AND AFFORDABILITY - residential area design, given increased diversity of housing types; enhanced pedestrian and transit access	*Hack, chap. 33 *Lynch & Hack, chap.9, App. E Alexander & Reed Bookout, pp.3-25; case studies *Campoli & MacLean *Davis, chaps.1,2 Fader *Lennertz & Qamar (in reader) NAHB, <i>Land...</i> , chap.5 Moudon (in reader) Southworth & Ben-Joseph, chap.5 (pp.109-120)
	W 10/28	Handout and discuss Assignment #4, Residential Cluster Plan Review Assignment #1 Site Analyses	
6	M 11/2	<b>Due online 8:00am:</b> Assignment #3 – Site & housing typology measurement study  HOUSING, HOUSES AND COMMUNITIES: PRIVATE AND PUBLIC SPACES - residential area design, given increased public/collective responsibility for on-site environmental conservation and public amenities - sun angles and shadow studies	*Hack, chap. 40 Corbett Greenwood Avenue Cottages (in reader) Jarvis Listoken & Walker, pp.200-205 *Newman (in reader) Newman (on reserve) Pyatok
	W 11/4	HOUSING, HOUSES AND COMMUNITIES: THE "NEW" URBANISM - recent trends in residential site planning from an historical perspective	*Calthorpe (in reader) *Southworth & Ben-Joseph, chap.5 (pp.97-109; 120-129), chap.6
7	M 11/9	OPTIONAL SITE VISIT: ECOLOGICAL NEW URBANIST HOUSING <i>High Point HOPE VI project (exact meeting time and location to be announced)</i>	
	W 11/11	NO CLASS; VETERANS DAY HOLIDAY	
8	S 11/15	<b>Due online 5:00pm:</b> Assignment #4 - Residential cluster plan	
	M 11/16	Assignment #4 - Residential cluster plan IN-CLASS REVIEW	
	W 11/18	MIXED USE AND COMMERCIAL SITES: LAYOUT AND ACCESS	*Hack, chaps. 34, 35, 39 *Lynch & Hack, chap.10

- densification/diversification of suburban malls

\*Clausen; Gladwell; Valente & Oringer; and other articles on malls

Handout and discuss Assignment #5, Mixed-use/Commercial Site Layout

Week	Day	Topic	References
9	M 11/23	MIXED USE AND COMMERCIAL SITES: PARKING DEMAND - access and parking - trip generation and distribution	*Hack, Chaps. 21-24 Barton-Aschman (in reader) Chrest (in reader) Robinette (in reader) *Urban Land Institute (in reader) Walker Parking Consultants (in reader)
	W 11/25	SITE DETAILS: MICROCLIMATE, PLANTING, FURNISHING AND LIGHTING	*Lynch & Hack, review Chaps.3, 6, 7 (pp.203-205), and 8 (pp.246-247) *Russ, Chap.9 (in reader) Listoken & Walker, pp.235-282 Marcus Miscellaneous outdoor lighting specifications samples
10	S 11/29	<b>Due online 5:00pm:</b> Assignment #5 – Mixed-use/Commercial Site Layout	
	M 11/30	Assignment #5 - Mixed-use/Commercial Site Layout IN-CLASS REVIEW	
	W 12/2	SITE DETAILS (continued)	
11	M 12/7	Handout and discuss Final Assignment <i>This week and next week schedule out-of-class consultations on final assignments</i>	
	T 12/8	<b>Due online 5:00pm:</b> Final Assignment Topic (URBDP 524)	
	W 12/9	Wrap-up; course evaluations	
Finals Week	F 12/18	<b>Due 11:59pm:</b> Final Assignment	