SITE PLANNING: ISSUES AND TECHNIQUES - SYLLABUS - UNIVERSITY OF WASHINGTON Urban Design and Planning 424/524 (3.0) • Spring 2024 • TTh 10:00-11:20 • Condon 125

Course website: https://canvas.uw.edu/courses/1720931 Instructor: Dan Abramson (PhD, Associate Professor) • <u>abramson@uw.edu</u> • Office Hours: Gould 448J or on Zoom Thursdays 12:30am-1:30pm, or by appointment (by email; always put "URBDP 424/524 Office Hours Appointment Request" in the subject line.)

COURSE OVERVIEW AND OBJECTIVES

URBDP 424/524 provides students with an overview of site planning as both a design activity and 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, especially through "missing middle" housing design and accessibility.

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 AND EVALUATION

Course assignments follow the sequence of key tasks outlined above. Each assignment is worth a certain portion of the course's total number of points (100), as listed below. At the end of the quarter, the points will be totaled and converted to a grade on the standard UW 4.0 scale -- i.e. each assignment point is worth 0.04 points towards a final grade of 4.0. (Note that, where some assignments specify extra credit to be given for certain work, it is possible to receive more than the stated number of points for that assignment below.)

Participation in class and online Canvas discussion: 10 points

Assignment #1. Site Analysis: 15 points

Assignment #2/Quiz. Road Layout, Grading and Subdivision Design/Revision: 15 points. Students who are taking the course for the Urban Design Certificate, MUP Urban Design Specialization, or as an elective for the MArch, BLArch or MLArch degrees must complete the design option for this assignment. All other students may complete either the design option or take the quiz.

Assignment #3. Site and Housing Typology Study: 10 points

Assignment #4. Residential Cluster Plan: 15 points

Assignment #5. Commercial Site Layout: 15 points

Final Assignment: **20 points**. 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 #2, #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. All other students also have the option to 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. There will be an option to complete the final assignment as a "multi-disciplinary" team of members in different degree programs and/or Urban Planning Specializations.

FORMAT

Most class sessions involve a combination of lectures and presentation and discussion of the readings and assignments, with occasional "design reviews" in which student work is shared, compared and discussed. 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 hands-on problem-solving coached by the instructor. One or two class periods may be devoted to an outdoor walking tour of a site on/near campus, and one or two optional class field trips 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 <u>neatly</u> from an 11" roll of tracing paper). Expect 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.

Students are encouraged to use the Canvas "Discussion" function to share course-related information, and post any queries to classmates and/or the instructor for help with research, clarification of the assignment instructions, or technical tips to completing the assignments. Please keep all discussions relevant to the course, and always first consult the provided references before asking others for help.

Note on in-person classroom learning with COVID-19 measures

This course attempts to make the most of in-person learning, as a social practice for professional education and for your and your classmates' mental health. Active participation in class-time lectures, discussion, question-and-answer about the assignments, and group work is essential to

succeed in the course. Late arrivals, early departures, and distracted attention to unrelated information on personal devices are all disruptive to the learning environment. Please respect your fellow students and the instructor by engaging attentively and contributing constructively!

That said, we continue to stay vigilant to the continued presence of COVID-19 and follow general good practice for preventing the spread of infectious disease, as described by the University's current COVID-19-related policies, "COVID-19 facts and resources" at https://www.washington.edu/coronavirus/Links to an external site.. If illness prevents you from attending class, you are expected to communicate promptly with the instructor, and to demonstrate that you have made up for missed material.

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/gencat/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 <u>Religious Accommodations Request form (https://registrar.washington.edu/students/religious-accommodations-request/).</u>

READINGS

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). Some further suggested readings may also be placed on the library course reserve, added to Canvas, or distributed in class. 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 and are also on reserve at Odegaard Undergraduate Library:

- For URBDP 424 and 524: Kevin Lynch and Gary Hack, *Site Planning*, 3rd 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.ublish.com/book/site-planning#purchase.

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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. Note that a 2nd edition of Russ's *Site Planning and Design Handbook* (2009) is now available in the library's reference section (does not leave the library). The Canvas online readings and reserves (both on the shelf and electronic) include chapters from the 1st edition (2002), which is similar enough for all but the most technical of purposes.

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.

Other materials useful as references for assignments, some of which may be put on reserve at Odegaard Undergraduate Library (not including materials in Canvas):

- 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)
- Dunham-Jones, Ellen, and June Williamson. Retrofitting Suburbia : Urban Design Solutions for Redesigning Suburbs, Wiley, 2011. ProQuest Ebook Central,

https://ebookcentral.proquest.com/lib/washington/detail.action?docID=675055

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
- 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.

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- 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
- 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
- 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

SCHEDULE	
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	HEDULE		
Week Day		Торіс	References
1	Tu 3/26	INTRODUCTION	
	Th 3/28	SITE ANALYSIS AND MAPPING - site inventory and evaluation - range and process of different types of site development and design - regulatory considerations	*Lynch & Hack, chaps.1,2,3 *Hack, Parts 1 and 2 Russ, pp.1-34 *LaGro, Section 1.5, and all of Part II
2	Tu 4/2	SITE ANALYSIS CONTINUED - remote data collection and presentation - importance of slope - learn to read a topographical map and relate it to natural systems - on-site reconnaissance and note-taking	*Lynch & Hack, chaps.4,5,6 *Hack, Part 3 *Untermann , pp.2-12 Untermann & Small, pp.21-35, 183-200 Rubenstein, chaps.2,6
	Th 4/4	Due online 8:00am: Assignment #1a - Site A Assignment #1b – DRAFT Site Analysis - on-site reconnaissance and note-taking - generating, justifying and depicting recomme	
	Sum 1/7	Ontional morning tour of Fort I auton Pade	nolonment site

Optional: morning tour of Fort Lawton Redevelopment site Sun 4/7

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SITE I LANNING, ISSUES AND TECHNIQUES		- SILLADUS -		UNIVERSITY
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Week	Day	1	References			
3	Tu 4/9	Bring to class 10:00am for discussion: Assignment	•			
		- generating, justifying and depicting recommen-	dations for development			
	Th 4/11	Due online 8:00am: Assignment #1b - Site Analysis (Part II)				
		DRAINAGE AND GRADING	*Hack, chaps. 25, 27, 32			
		- moving earth and water given different	*Lynch & Hack, chap.8, Appendix K			
		slopes, soil types and ground cover	Russ, chap. 6			
		- strategies for minimizing runoff and	*Untermann, p.13ff			
		preserving natural vegetation and habitat	Rubenstein, chaps.7,8			
		- wastewater systems	Untermann, "Principles"			
4	Tu 4/16	PROPERTY SUBDIVISION AND ACCESS:	*Lynch & Hack, pp.193-221,			
7	1u 4 /10	ROAD AND INFRASTRUCTURE LAYOUT	Appendix J			
		- basics of conventional subdivision layout	Russ, Chap.8			
		- road intersection standards and horizontal and	*Listoken & Walker, pp.293-342			
			Rowe			
		vertical alignment principles	Southworth & Ben-Joseph, chaps.1,2,3			
			Kulash, chaps.1,2,3,4			
			Rubenstein, chap.9			
	Th 4/18	PROPERTY SUBDIVISION AND ACCESS:	*Hack, chap. 16			
		ECOLOGICAL AND PEDESTRIAN-	Burden			
		FRIENDLY DESIGN	*Girling and Kellett			
		- shared/controlled access	Arendt			
		- green infrastructure	Puget Sound Partnership			
		8	Alternative Development Standards			
5	Tu 4/23	Due online 8:00am: "Assignment" #2 – Road L	ayout, Grading and Subdivision			
		Design/Take-home Quiz				
		Handout and discuss Assignment #3, Site &	*Hack, chap. 33			
		Housing Typology Study	*Lynch & Hack, chap.9, App. E			
			Alexander & Reed			
		HOUSING, HOUSES AND COMMUNITIES:	Bookout, pp.3-25; case studies			
		DENSITY, DIVERSITY AND	*Campoli & MacLean			
		AFFORDABILITY	*Davis, chaps.1,2			
		- residential area design, given increased	Fader			
		diversity of housing types; enhanced pedestrian	*Lennertz & Qamar			
		and transit access	NAHB, <i>Land</i> , chap.5			
			Moudon			
			Southworth & Ben-Joseph, chap.5			
			(pp.109-120)			
			(pp.109-120)			
	Th 4/25	HOUSING, HOUSES AND COMMUNITIES:	*Hack, chap. 40			
		PRIVATE AND PUBLIC SPACES	Corbett			
		- residential area design, given increased	Greenwood Avenue Cottages			
		public/collective responsibility for on-site	Jarvis			
		environmental conservation and public	Listoken & Walker, pp.200-205			
		amenities	*Newman			
		- sun angles and shadow studies	Pyatok			

5/22/25

Week	Day	Торіс	References			
6	Mo 4/29	•				
Tu 4/30		Handout and discuss Assignment #4 – Residential Cluster Plan Review Assignment #1 Site Analyses				
	Th 5/2	HOUSING, HOUSES AND COMMUNITIES: THE "NEW" URBANISM - recent trends in residential site planning from an historical perspective	*Calthorpe *Southworth & Ben-Joseph, chap.5 (pp.97-109; 120-129), chap.6			
7	Tu 5/7	In-class work session				
	Th 5/9	MIXED USE AND COMMERCIAL SITES: LAYOUT AND ACCESS - densification/diversification of suburban malls	*Hack, chaps. 34, 35, 39 *Lynch & Hack, chap.10 *Clausen; Gladwell; Valente & Oringer; and other articles on malls			
8	Tu 5/14	Due online and in class on paper 8:00am: Assignment #4 - Residential cluster plan (and subdivision and road layout revision) for IN-CLASS REVIEW				
	Th 5/16	Handout and discuss Assignment #5 - Mixed Us	e, Parking Demand, and Trip Generation			
9	Tu 5/21	MIXED USE AND COMMERCIAL SITES: PARKING DEMAND - access and parking - trip generation and distribution	*Hack, Chaps. 21-24 Barton-Aschman Chrest Robinette *Urban Land Institute Walker Parking Consultants			
	Th 5/23	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 Listoken & Walker, pp.235-282 Marcus Miscellaneous outdoor lighting specifications samples			
10	Tu 5/28	Due online at 8:00am: Assignment #5 - Mixed Use, Parking Demand, and Trip Generation				
		Handout and discuss Final Assignment Schedule out-of-class consultations on final assignment over next two weeks				
	Th 5/30	Wrap-up; course evaluations				
Finals Week	Fr 6/7	Due 11:59pm: Final Assignment				