

Department of Landscape Architecture  
Mississippi State University  
Spring 2014

## **LA 8522 Landscape Architecture Graduate Studio II—Public Health**

Instructor: Chuo Li, PhD

Office Hours: M, W, F 11am-12pm and by appointment

Schedule: M, W, F 9am – 10:50am

### **Course Description**

How does the built environment impact public health? How can planning and landscape design improve quality of life, assure better environmental and human health? The course will be focused on landscape design and human health, which responds to an increasing awareness of the failure of contemporary urban planning and community design to recognize human health. In this course, you will be introduced to some of the key considerations in developing design solutions to address public health issues such as obesity, environmental pollution, and social justice. Students will be challenged to think critically of the impact of the built environment on human well-being. The course offering is meant to be an introduction of the methods, theories, and concepts of healthy places as it applies to the practices of landscape architecture. The goals of the course include:

- To equip students with knowledge of precedents, standards, measures of landscape design that promotes public health
- To learn the environmental mechanism and landscape performance metrics in human health and utilize them to evaluate the health impacts of the built environment
- To advance design models that incorporate community health

The studio intends to encourage the students to challenge their own abilities and knowledge through exploration, experimentation, and refinement. The class projects provide the opportunity to integrate knowledge gained from lectures, readings, field trips, and class discussions with professional design practices in landscape architecture.

### **Course Work**

Because this studio requires a wide scope of knowledge, skills, and scale of inquiry, course work includes completion of reading assignments, participation of class discussion, site visit, and developing designs. Each course project will have a separate project description providing detailed instruction.

### **Project One: Landscape Performance Metrics in Public Health**

In this project, you will work in community open spaces and assess the health consequences of the design forms. Through the process of understanding existing literatures on the health impacts of the built environment, measuring landscape design qualities, behavior observation, you will develop a report on landscape performance

metrics in identifying and evaluating the landscape design qualities that would encourage healthy living.

### Project Two: Community Open Space—Greenway Design

Building on the work in Project One, Project Two will focus on the application of landscape performance metrics in public health on design practices, both as a design guideline and an audit tool for your design proposal. The purpose of this project is to incorporate the landscape performance metrics and active living network into the traditional design process for landscape architects. The project will utilize studies and methodologies developed in the field of built environment and human health to propose design solutions that support and enable healthy and active lifestyles.

### **Course Evaluation**

Project will be evaluated based up achievement as displayed in your process, product, and presentation.

Project One: Landscape Performance Metrics – 35%

Project Two: Greenway Design – 45%

Project Presentation: 10%

Class Attendance and Discussion: 10%

### **Required Readings**

- Frumkin H, Frank L, Jackson R. 2004. *Urban Sprawl and Public Health*. Island Press.
- Reading materials in Blackboard (added throughout semester)

### **Recommended Readings**

- Kawachi, I, Berkman, L. 2003. *Neighborhoods and Health*. Oxford University Press.
- Frank, L, Engelke, P, Schmid, T. 2003. *Health and Community Design: The Impacts of the Built Environment on Physical Activity*. Island Press.
- Morris, M, Duncan R, Hannaford K, Kochtitzky C, Rogers V, Roof K, Solomon J. 2006. *Integrating Planning and Public Health*. APA Planning Advisory Service.

### **Recommended Websites**

Design for Health

<http://www.designforhealth.net/>

Healthy Urban Planning

[http://www.euro.who.int/healthy-cities/UHT/20050201\\_2](http://www.euro.who.int/healthy-cities/UHT/20050201_2)

Robert Wood Johnson Foundation

<http://www.rwjf.org/publications/otherlist.jsp>

International Healthy Cities Foundation

<http://www.healthycities.org/>

## Class Schedule

Date		Class Topic	Texts
Week 1	Jan. 13	Introduction: Course overview and themes  Hand out project one	
	Jan. 15	Topic: Urban Sprawl  Landscape performance measurement	<ul style="list-style-type: none"> <li>- Burchell, R. W. and Mukherji, S. 2003. Conventional development versus managed growth: the costs of sprawl. <i>American Journal of Public Health</i> 93 (9): 1534-1540.</li> <li>- Frumkin, H, Frank, L, Jackson, R. 2004. Chapter 1 and 5.</li> </ul>
	Jan. 17	Site visit, behavior observation and behavior mapping	<ul style="list-style-type: none"> <li>- Geller A. 2003. Smart growth: a prescription for livable cities. <i>American Journal of Public Health</i>. 93(9): 1410-1415.</li> <li>- Handy, S, Boarnet, M, Ewing, R, Killingsworth, R. 2002. How the built environment affects physical activity. <i>American Journal of Preventive Medicine</i> 23 (2s), 64-73.</li> <li>- Urban Sprawl and Public Health. Ch11.</li> </ul>
Week 2	Jan. 20	Holiday (No Class)	
	Jan. 22-24	Design Week (No Class)	
Week 3	Jan. 27	Studio work/desk crits as requested	<ul style="list-style-type: none"> <li>- Northridge, M. E, Sclar, E. 2003. A joint urban planning and public health framework: Contributions to health impact assessment. <i>American Journal of Public Health</i> 93 (1), 118-121.</li> </ul>
	Jan. 29	Class discussion of readings	<ul style="list-style-type: none"> <li>- Malizia E. 2005. City and regional planning: a primer for public health officials. <i>American Journal of Health Promotion</i> 19(5): S1-13.</li> <li>- Griffiths, J. 2006. Mini-symposium: Health and environmental sustainability: The convergence of public health and sustainable development. <i>Public Health</i> 120, 581-584.</li> </ul>
	Jan. 31	Studio work/desk	<ul style="list-style-type: none"> <li>- Kawachi, I. and Berkman, L. 2003. Ch 1.</li> </ul>

		crits	
Week 4	Feb. 3	<b>Presentation: Project One Phase I Case Studies</b>	
	Feb. 5	Project One Phase II: community open space performance metrics in public health  Lecture: Performance metrics	<ul style="list-style-type: none"> <li>- Complete street metrics (example)</li> <li>- Leed ND</li> <li>- Morris: Appendix D</li> </ul>
	Feb.7	Studio work	<ul style="list-style-type: none"> <li>- Dannenbert et al. 2006. Growing the field of health impact assessment in the United States: an agenda for research and practice. <i>American Journal of Public Health</i> 96 (2): 262-270.</li> <li>- Kawachi, I. and Berkman, L. 2003. Ch 5.</li> </ul>
Week 5	Feb. 10	Class discussion: Health Impact Assessment	<ul style="list-style-type: none"> <li>- Forsyth A, Slotterback C, Krizek K. 2010. Health impact assessment in planning. <i>Environmental Impact Assessment Review</i> 30: 42-51.</li> <li>- Student research of performance metrics examples</li> </ul>
	Feb. 12	Studio work/desk crits	
	Feb. 14	Work day	<ul style="list-style-type: none"> <li>- Srinivasan S., Deary, A. O'Fallon, L. R. 2003. Creating healthy communities, healthy home, healthy people: initiating a research agenda on the built environment and public health. <i>American Journal of Public Health</i> 93 (9): 1446-1450.</li> </ul>
Week 6	Feb. 17	<b>Pin-up: Performance metrics</b>	
	Feb. 19	Studio work/desk crits	

		as requested	
	Feb. 21	Studio work	
Week 7	Feb. 24	<b>Presentation: Project One Phase Two</b>  <b>PDF file due by 12pm</b>	
	Feb. 26	Lecture: Greenway  Hand out project 2	<ul style="list-style-type: none"> <li>- Dannenberg et al. 2003. The impact of community design and land-use choices on public health: a scientific research agenda. <i>American Journal of Public Health</i> 93 (9): 1500-1508.</li> <li>- Lindsey, G, Wilson, J, Yang J. A, Alexa, C. 2008. Urban greenways, trail characteristics and trail use: Implication for design. <i>Journal of Urban Design</i> 13 (1), 53-79.</li> </ul>
	Feb. 28	Site visit: Site inventory and analysis	<ul style="list-style-type: none"> <li>- Northridge, M. E, Sclar, E. D, Biswas, P. 2003. Sorting out the connections between the built environment and health: a conceptual framework for navigating pathways and planning healthy cities. <i>Journal of Urban Health</i> 80 (4): 556-568.</li> </ul>
Week 8	March 3	Topic: Making Healthy Places  Lecture and class discussion	<ul style="list-style-type: none"> <li>- Frank L, Anderson M, Schmid T. 2004. Obesity relationships with community design, physical activity, and time spent in cars. <i>American Journal of Preventive Medicine</i> 27 (7): 87-96.</li> </ul>
	March 5	Studio work/desk crits	
	March 7	Field Trip	
Week 9	March 10-14	No Class (Spring Break)	
Week 10	March 17	Topic: New Urbanism  Lecture and	<ul style="list-style-type: none"> <li>- Cervero, R., et al. 2007. Models for change: Lessons for creating active living communities. <i>Planning Magazine</i>, A1-A12.</li> <li>- Rodriguez, D. A., Khattak, A. J., and Evanson, K. R. 2006.</li> </ul>

		class discussion	Can New Urbanism encourage physical activity? <i>Journal of the American Planning Association</i> 77(2) (1), 43-54.
	March 19	Studio work/desk crits	- Evans, G. 2003. The built environment and mental health. <i>Journal of Urban Health</i> 80 (4): 536-555.
	March 21	Studio work	
Week 11	March 24	<b>Project Two Phase I Presentation</b>	
	March 26	Work Day/ Phase II Master Plan: concept and program	- Pucher J and Dijkstra L. 2003. Promoting safe walking and cycling to improve public health: lessons from the Netherlands and Germany. <i>American Journal of Public Health</i> 93 (9): 1509-1516.
	March 28	Work Day/ concept and program	
Week 12	March 31	<b>Pin-up: Concept and program</b>	
	April 2	Studio work/schematic plan	- Leyden, K. M. 2003. Social capital and the built environment: the importance of walkable neighborhoods. <i>American Journal of Public Health</i> 93 (9): 1546-1551.
	April 4	Studio work/desk crits	- Burden, D. 2000. Street design for health neighborhoods. Website: <a href="http://gulliver.trb.org/publications/circulars/ec019/Ec019_b1.pdf">http://gulliver.trb.org/publications/circulars/ec019/Ec019_b1.pdf</a> - Hansen, G. 2014. Design for healthy communities: The potential of form-based codes to create walkable urban streets. <i>Journal of Urban Design</i> 19 (2): 151-170.
Week 13	April 7	<b>Pin-up: schematic plan</b>	

	April 9	Studio work	Cook, J. A. et al. 2013. How does design quality add to our understanding of walkable communities? <i>Landscape Journal</i> 32 (2): 151-162.
	April 11	<b>Project Two Phase II Presentation: Master Plan</b>	
Week 14	April 14	Studio work/site plan	
	April 16	Site plan/desk critics	
	April 18	Holiday (No Class)	
Week 15	April 21	Studio work	
	April 23	Studio work	
	April 25	Work Day/utilize performance metrics for project evaluation	
Week 16	April 28	Studio work	
	April 30	<b>Project Two Final Presentation</b> <b>PDF file due by 12pm</b>	

(Please note that situations may arise that necessitate schedule changes)