



Designing Healthy Communities

graduate level research seminar

LA 699 - spring 2017

instructor:	Kristín Thorleifsdottir, Ph.D., assistant professor Department of Landscape Architecture
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office hours:	By appointment rm 12 ground level Ag. Hall
course type:	3 cr hrs graduate level
course structure:	Lectures, guest speakers, discussions, fieldtrips
assignments:	Reading assignments, leading discussions, course project, presentation
course meeting times:	Tuesdays 1-3 rm 4191 in SoHE
course prerequisites:	Cross-disciplinary elective graduate level course

course description

This course is a graduate seminar with an emphasis on sustainable community design and design principles aimed at promoting people's health and wellbeing. The course has a cross-disciplinary focus and may be of interest to students in Landscape Architecture, Design Studies, Urban and Regional Planning, Population Health Sciences, Environmental Studies, Community and Environmental Sociology, Geography and other areas of study as well as advanced undergraduate students.

In the course we will discuss contemporary human health and wellbeing issues as they relate to the quality of the physical environment at various scales and through a historical lens. We will focus on healthy living in terms of everyday urban settings that promote physical activity, provide access to healthy food, offer restorative and therapeutic qualities, and encourage healthy social interaction. A review of tools aimed at better understanding environment-health relationships is also on the agenda including public health records, audit tools, place-making patterns, and sustainability rating scales focusing on health benefits of good design.

course context

Although both health and living conditions have improved significantly in the western world since World War II, we are now experiencing new types of health problems; lifestyle related diseases of physical, social and/or mental origins. These health threats cannot only be countered by proper nutrition and medical advances alone; a sharper focus on the sources of many of the problems is needed including the quality of the built environment.

Focusing on today's health problems is also not enough. In the next 35 years it is estimated that Earth's population will grow from 7.3 billion to 8.9 billion people. During this period the U.S. population will grow from 324 million to 439 million, or about 74% increase. It is estimated that about 80% of the population will live in urban areas.

In order to prepare for rapidly transforming urban environments, where landscape architects will play an important role, it is important to teach about the complexity of environmental and human systems and subsystems that impacts human health and wellbeing. Urban development has to happen within the framework of sustainability or “what’s good for your personal health is good for the planet’s health; what’s personally sustainable is globally sustainable (Ornish, 2009).”

Health and wellness are influenced by the places in which people live, learn, work, and play and well designed communities can better support health and well-being and make healthy choices easy and affordable. Rethinking the ways the physical environment is planned, designed and constructed is necessary; the habitat, which we share with other species; our homes, workplaces, outdoor spaces, streets and paths, transportation systems, neighborhoods and districts, villages, towns and cities. How the built environment affects people’s health and wellbeing and how designing more sustainable urban environments that minimize impact on natural resources and increase the quality of urban living are the fundamental questions asked in this graduate level seminar.

course learning objectives

to build knowledge and practice critical thinking (learn by discovering and discussing)

- to equip students with knowledge of relevant literature by noted authors in the field
- to challenge students to think critically of the impact the physical environment has on people and the role designers play in creating healthy places
- to provide students with opportunities to describe and discuss health problems as they intersect with the physical environment
- to arouse students curiosity and encourage them to seek further knowledge
- to encourage students to learn about environmental mechanisms and systems thinking

to apply existing knowledge to design (learn by doing)

- to provide students with tools to link and utilize analytical findings in design solutions i.e. turn data into workable tools
- to introduce sustainability-environment-health performance standards and metrics and their functional value in design programming
- to encourage students to explore precedents and best-case scenarios
- to practice both team collaboration as well as independent work
- to provide students’ with opportunities to advance their research skills

to evaluate design solutions (learn by reflecting)

- to provide students with an opportunity to reflect (critical evaluation) on their work
- to encourage discussion of the responsibility of designers

course assignments and grading criteria

1. summaries from readings (20 points)

Reading assignments and due dates are listed in the course schedule. Each student should turn in a summary from every reading assignment. Besides added knowledge, the summaries prepare students for active participation in class discussions and focused writing. The reading assignments will be uploaded to learn@UW a week before the summaries are due or earlier.

Each summary should be max **1 page** (approx. 1/2 synopsis and 1/2 own reflection). Use 8.5” x 11”, 1.5 line space and 11pt times new roman (or comparable). Please submit the files in either **PDF or MS Word** format. The heading should include your full name, course number, date and full reference (you will find a preformatted document on UW Canvas). For example:

Janet Jonsson for LA 699 - January 26, 2017.

Summary 1 from: Dannenberg, A. L., Frumkin, H., & Jackson, R. J. (2011). *Making Healthy Places. Designing and Building for Health, Well-being, and Sustainability*. Washington: Island Press.

Name the file with your last name and summary number (e.g., Summary_1_Jonsson) and upload to learn@UW, folder called 'reading summaries' before **midnight the day before lecture**. Incomplete summaries will also affect the grade.

2. student-lead discussions (10 points)

The typical class meeting is divided into two parts: lecture and discussions. Each student is expected to lead one or more discussion sessions (depending on the number of students) using points from the assigned reading and additional material.

3. research paper – healthy campus physical environment performance evaluation (70 points)

The course project is a **research paper** (60 points) and **presentation** (10 points) on a **topic of interest** (e.g., climate and active travel, availability and connectivity of paths and active travel, public open space and social interaction, access to nature and mental restoration, access to healthy food and weight, air quality, trees and asthma, third places and sense of belonging, availability of recreational spaces and participation in physical activity etc.). Instructor's approval for topic is needed.

The objective is to perform an **environment performance evaluation** of an **indoor or outdoor** setting on campus in terms of **individual or population** health and wellbeing by identifying and evaluating environmental factors (health determinants) that affect use, behavior, experience, perception and/or attitudes towards healthy living.

The paper should be about 10-15 pages (excl. title page, bibliography and attachments). Please use 8.5x11 paper size, 1.5 line space and 11pt times new roman (or comparable). Use maps, photographs, graphs and diagrams to illustrate your points. Power point **presentations** are scheduled during the last class meeting. The presentation should be about 10 minutes +5 min for discussions.

The research paper should include the following sections (pay attention to the value of each section):

1. Title page
2. 200 words abstract (5 pts)
3. Introduction to the project (5 pts)
4. Literature review (and bibliography) (15 pts).
5. Case study (10 pts):
 - a. Introduce the study site, aims, research questions etc.
 - b. Need-based analysis (user group, health problems, physical environment needs).
 - c. Methodology:
 - i. Develop an environment-health worksheet using relevant tools e.g., indicators, audits, metrics, scales, indices etc.)
 - ii. Methods for on-site data collection (e.g., behavior observations, photomapping, interviews, questionnaire, walk-throughs etc.), analysis, and synthesis of data.
6. Findings from the environment performance evaluation (15 pts). Focus on the identification of physical environment features that may affect the health and/or wellbeing (physical, mental or social) of the focus group.
7. Conclusion and discussion e.g., discuss the findings and make suggestions for environmental improvements (intervention program) (10 pts)
8. Bibliography
9. Attachments (e.g., scanned raw data worksheets, questionnaire form, analytical spreadsheets, additional photographs, PPT presentation slides etc.)

class attendance and participation

Class attendance and participation in discussions can affect the course grade as follows:

>95% attendance and active participation	+5 points
<80% attendance	-5 points
<70% attendance	-10 points
<60% attendance	F in course grade

summary of deliverables and grading criteria

The following scale will be used to evaluate the above sections/projects and establish final grade:

<u>deliverables</u>	<u>points (total 100%)</u>
summaries from reading assignments	20 points
leading discussions and discussion points	10 points
course project	
-research paper	60 points
-ppt presentation and slides	10 points
class attendance and active participation	+/- points

<u>points</u>	<u>grade</u>	
93-100	A	excellent
90-92	AB	intermediate grade
83-89	B	good
80-82	BC	intermediate grade
73-79	C	fair
65-72	D	poor
<64	F	failure

A typical "A" report is clearly written and well organized, but most importantly, it contains a perceptive analysis supported by graphics and material covered in course readings and lectures. It demonstrates that the student has grappled with the materials presented in the course, synthesized the material, and formulated a compelling analysis.

A typical "B" report is a solid work complete with supporting graphics that demonstrates that the student has a good grasp of the course material. Yet a typical "B" paper mainly provides a response to the assignment, with little evidence of insight in the analysis. Other "B" papers give evidence of insight but do not present the analysis clearly or convincingly.

A typical "C" report provides analysis based on a less thorough or accurate response to the assignment, or a less thorough defense of an analysis.

A report that receives a grade less than "C" typically does not respond adequately to the assignment, is marred by frequent errors, unclear writing, poor organization, or some combination of those problems.

course readings and extended bibliography

required course book

Dannenberg, A. L., Frumkin, H., & Jackson, R. J. (2011). *Making Healthy Places. Designing and Building for Health, Well-being, and Sustainability*. Washington: Island Press.

websites on sustainability rating systems

1. U.S. Green Building Council: (USGBC): <http://www.usgbc.org>
2. BREEAM-communities: <http://www.breeam.org/page.jsp?id=372>
3. LEED-neighborhoods: <http://www.usgbc.org/articles/getting-know-leed-neighborhood-development>
4. Sustainable Sites Initiative (SITES): <http://www.sustainablesites.org>
5. WELL building standard: <http://delos.com/about/well-building-standard/>
6. DGNB: <http://www.dgnb-system.de/en/>

planning/designing for health and wellbeing

1. Smart Growth America. Making neighborhoods great together (complete street metrics): <http://www.smartgrowthamerica.org/complete-streets/implementation/measuring-performance>

uw campus masterplan

1. Campus masterplan: <http://masterplan.wisc.edu>

wisconsin EHR websites

1. Survey of Health of Wisconsin (SHOW): <http://www.med.wisc.edu/show/survey-of-the-health-of-wisconsin/35828>
2. Survey of Health of Wisconsin - assessment of the social and built environment (WASABE): <http://www.med.wisc.edu/show/wasabe-wisconsin-assessment-of-the-social-and-built-environment/44531>
3. WI State Health Plan – Healthiest Wisconsin 2020: <https://www.dhs.wisconsin.gov/hw2020/index.htm>

national websites

1. National Center for Health Statistics: <http://www.cdc.gov/nchs/>
2. Office of Disease Prevention and Health Promotion: <https://www.healthypeople.gov>
3. National Prevention Strategy. America's Plan for Better Health and Wellness (2011): <http://www.surgeongeneral.gov/priorities/prevention/strategy/report.pdf>
4. CDC Health Impact Assessment (HIA): <http://www.cdc.gov/healthyplaces/hia.htm>
5. CDC – Designing and Building Healthy Places: <http://www.cdc.gov/healthyplaces/>
6. CDC – Transportation Recommendations: <http://www.cdc.gov/transportation/>
7. CDC – Physical activity for everyone guidelines: <http://www.cdc.gov/physicalactivity/everyone/guidelines/index.html>
8. Health impact assessment in the United States (the PEW Charitable Trusts examples of projects – 4 in Madison): <http://www.pewtrusts.org/en/multimedia/data-visualizations/2015/hia-map>
9. Robert Wood Johnson Foundation – Built Environment and Health: <http://www.rwjf.org/en/our-topics/topics/built-environment-and-health.html>
10. County Health Rankings and Roadmaps: <http://www.countyhealthrankings.org>

international websites:

1. The Urban Health Index (for smaller urban areas): http://www.who.int/kobe_centre/measuring/innovations/urban_health_index/en/.
2. U.N. Development Programme (UNDP) Human Development Index: <http://hdr.undp.org/en/content/human-development-index-hdi>

3. WHO Urban Heart Project (Urban Health Equity Assessment and Response Tool): http://www.who.int/kobe_centre/publications/urban_heart_manual.pdf
4. WHO Healthy Cities Movement: http://www.who.int/healthy_settings/types/cities/en
5. Design for Health: <http://designforhealth.net/>
6. HAPI – Health and Places Initiative: <http://research.gsd.harvard.edu/hapi/>
7. Healthy Urban Planning: <http://www.euro.who.int/en/health-topics/environment-and-health/urban-health>
8. International Healthy Cities Foundation: <http://healthycities.org>
9. Healthy Communities Institute: <http://www.healthycommunitiesinstitute.com>
10. Designed to Move: Active Cities (Active Living by Design, 2015): <http://www.designedtomove.org/resources/active-cities>

other

Mackinnon, The Problem with Nature Therapy, *The medicalization of nature turns a relationship into a dose*. Retrieved 01.21.2016: <http://nautilus.us/issue/32/space/the-problem-with-nature-therapy>

extended bibliography

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academic integrity

What is academic integrity and why are we promoting it? Academic integrity means being honest about your intellectual work. This is fundamental to the pursuit of knowledge, and underlies the conduct expected of all members of the landscape architecture profession. We encourage you to visit the following webpage and get familiar with the information and resources referenced there as well as in the drop-down menu labeled “ Academic Integrity” at the top of the page.

<http://www.students.wisc.edu/doso/academic-integrity/>

As a student of the University of Wisconsin it is your responsibility to become familiar with, understand, and abide by the general Statement of Principles and Disciplinary Guidelines outlined by the Dean of Students and the UW Board of Regents. **A link to this information is found at the bottom of the webpage referenced above.** These guidelines protect both you and the university if an infraction has occurred. Ignorance of these regulations is not a defense in cases of infringement. So. Just DON'T Do It!

definition of academic dishonesty

(from UW Academic code 14.03) "Academic misconduct is an act in which a student:

1. Seeks to claim credit for the work or efforts of another without authorization or citation;
2. Uses unauthorized materials or fabricated data in any academic exercise;
3. Forges or falsifies academic documents or records;
4. Intentionally impedes or damages the academic work of others;
5. Engages in conduct aimed at making false representation of a student's academic performance;

6. Assists other students in any of these acts

"Examples of academic misconduct include, but are not limited to: cutting and pasting text from the web without quotation marks or proper citation; paraphrasing from the web without crediting the source; using another person's ideas, words, or research and presenting it as one's own by not properly crediting the originator; stealing (or altering) examinations or course materials; changing or creating data in a lab experiment; altering a transcript; signing another person's name to an attendance sheet (or group worksheet); hiding a book knowing that another student needs it to prepare an assignment; collaboration that is contrary to the stated rules of the course, or tampering with lab experiment or computer program of another student".

consequences for academic dishonesty

To determine whether academic dishonesty has occurred, the instructors will meet with the student. Students who commit acts of academic misconduct will write letter describing what they did and, if appropriate, apologize to individuals who were involved in the incident. In accordance with the penalties listed in the University's UWS14, Student Academic Disciplinary Procedures we recognize three levels of consequences (1) An oral reprimand; and (depending on the severity of the case) written reprimand presented only to the student; or the completion of an appropriate assignment to be evaluated by the instructors (2) a lower or failing grade on the assignment, exam, or course; removal of the student from the course or program; and a written reprimand to be included in the student's university disciplinary file, (3) recommendation for disciplinary probation for up to 2 years, suspension, or expulsion from the University.

(Adopted from the UW-Madison Biocore Program)