ENVIRONMENTAL HEALTH
ROLLINS SCHOOL OF PUBLIC HEALTH
EMORY UNIVERSITY

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CP6850C/EH 584: Public Health and Built Environment

Thursdays, 1:00-2:45pm

GT: Old Civil Engineering, Room G10 Emory: Claudia Nance Rollins (CNR), Room 1034 * Class meeting locations vary throughout the semester. Pay close attention to the course schedule.

This interdisciplinary course, examines how cities and neighborhoods can have both positive and adverse effects on human health, and produces recommendations to improve these outcomes. This **SEMINAR** is an elective planning and public health course that explores the interconnections between these fields and equips students with skills and experiences to plan healthy communities. The planning and public health disciplines emerged together with the common goal of preventing outbreaks of infectious disease. Since that time, the two disciplines diverged in their foci; public health following a clinical model and planning focusing on urban design and physical form. However, as the intimate connections between the built environment and disease continue to be revealed, the planning and public health fields have begun to converge once again. This course covers planning and public health foundations, natural and built environments, vulnerable populations and health equity, and health policy and global impacts. For their end of semester assessment students complete a healthy communities plan on a community of particular interest, applying current evidence and best practices studied throughout the semester.

Readings are assigned and discussed during class sessions, coupled with experiential learning exercises. Students are expected to think critically and to incorporate their unique perspectives into the classroom discussions and semester assignments. The course involves academic and topical readings, minilectures, student presentations and both in-class and homework assignments. The course is designed to enhance students' (1) awareness of how planning impacts health, (2) understanding of public health influences on the built environment, and (3) ability to create healthy communities.

Pre-requisites: Graduate standing at Georgia Institute of Technology or Emory University, or with permission of instructors.

Course objectives: At the end of the course, students will be able to:

- Understand public health and planning history, evolution and significant movements to the
 present, and historical and current theories on the relationship between the built environment
 and public health. (Foundational Knowledge)
- Identify contemporary features of the built environment such as patterns of development, parks, public works projects, houses, and transportation systems that reflect past efforts to influence health, and use methods developed by architects, urban planners, public health professionals, sociologists and anthropologists to address current health impacts of the built environment. (Application)

- Learn about oneself and the context in which others operate to better integrate that understanding when evaluating differing built environments, socioeconomic positions, social and cultural backgrounds, and health status. (Human Dimensions)
- Adopt new perspectives, interests or values based on issues addressed throughout the semester. (Caring)
- Develop skills to identify studies and engage communities, critique methods and findings, and apply lessons from planning and public health research to current and future problems. (Learning How to Learn)
- Integrate current evidence regarding the impacts of the built environment on health with information and perspectives from other courses and/or personal experiences. (Integration)

Texts: We have <u>one required textbook</u>, available from the Georgia Tech bookstore on Spring Street (or from various online vendors):

Dannenberg A, Frumkin H and Jackson R. 2011. Making Healthy Places. Washington, DC: Island Press.

Additional materials will be made available through the Canvas site (https://Canvas.gatech.edu). Emory students will be given access to GT's Canvas site. Consult the reading lists or the instructor, if unsure.

Procedures: Classes will combine lectures, discussions, exercises, fieldwork, and student presentations. Informed participation in discussions is essential, so your first responsibility is to do required reading and other homework on time. Fieldwork may take place at times that do not correspond to the assigned class period. In such cases every effort will be made to accommodate other obligations you may have.

Written assignments should be prepared according to a standard social science format. Those not familiar with the conventions of social science writing should obtain and use any of the style manuals designed to present these (e.g. Publication Manual of the American Psychological Association 5th ed. Washington DC: 2001). Effective communication is the primary goal, but clarity as to originality of ideas is vital. Ideas stimulated by others should be cited appropriately as, of course, should be quotes and facts taken from other sources. Timely submission of written assignments is important; late submissions will be penalized. In general, unless instructed otherwise, I believe it is useful to imagine that you are writing for a general national professional urban planning or public health audience. This requires that you not assume the reader will be familiar with the context, laws, and institutions of the plans or programs you are writing about, but it does suggest that you can use the language of planning and public health theory and methods efficiently without the need to explain fundamental concepts which are widely understood by the educated professional community.

Assignments:

<u>Urban Planning Policy levers</u> (25% of course grade) The aim of this assignment is twofold- 1) familiarize PH students with various planning specializations and policy levers, plans and processes that are federally/locally mandated or otherwise 2) familiarize urban planning students with various PH theories, metrics and other concepts that can be introduced to strengthen the inclusion of health priorities. Student teams will complete an in-class presentation and 5-page written report on their urban planning topic and two example planning documents. The critique should compare and contrast the selected examples chosen. The 5-page written report will include the following components:

1. Introduction: provides an overview of the report topic, including the particular urban planning focus area being addressed.

- 2. Federal/local legislation, history, mandates, requirements, etc. related to the focus area
- 3. Overview of two plan samples that do an exemplary job of integrating planning and public health principles
- 4. Critique of examples (what can be done better- metrics, community engagement...)
- 5. Conclusion: Important takeaways on state of practice and for healthy community plans
- 6. References

The report must be handed in to the professor or TA at the beginning of the assigned class and integrate highlights from this forum.

<u>In-Class Cumulative Quiz</u> (20%): There will an in-class cumulative quiz that covers the entire content of the class. The quiz will mostly contain multiple-choice and sentence completion questions.

<u>Healthy Communities Plan</u> (45% of course grade) In interdisciplinary teams, students will select a local neighborhood of interest and develop a report guiding a planning and/or public health agency on ways to create, retrofit or maintain a healthy community in the selected area. Read Making Healthy Places Chapters 18, 22 and 24 for some ideas on research topics of interest at this intersection as a way to guide your topic selection. Your report should include the following: (1) a history of the area, (2) a critique of the current state of the area's built environment and health with relevant data, (3) recommended approaches (policies, interventions, stakeholders, etc.) toward improvements measured against the targets set forth in Healthy People 2020, The Community Guide, and other evidence-based strategies. The report should be formatted as a professional product, single-spaced, 15 pages including tables, charts. References should begin after page 15.

- Midterm Presentation and Report (5% oral, 10% written of course grade) Student teams will give
 brief presentations of their selected area, topic and data analysis on the current state of the
 area's built environment and health. Students are also expected to submit a 5-page paper
 documenting their progress as presented in the class with an outline per the assignment
 guidelines.
- Final Presentation and Report (10% oral, 20% written of course grade) Student teams will
 present their healthy community plan and submit their professional reports. Presentations will
 be limited to a maximum of 10 minutes with 5 minutes for questions and discussion.
 Presentations will be held on the last scheduled meeting day. Final Reports are due to Canvas on
 11/30.

Participation (10% of course grade) Students are expected to actively engage throughout the semester through the discussions, guest lectures, and other presentations. Participation is measured by engagement in the various discussion opportunities.

Grading Practices: Assignments are graded in the usual A, B...F system. In general, we endeavor to follow these grading standards:

"A": exemplifies excellence: including clear reasoning, sound methods, forceful exposition, and stimulating ideas in comparison with others at the same stage of career. Independent and creative thinking utilizing a thorough understanding of course concepts is evidenced. Language usage, calculation, attribution, and formatting are essentially free of error.

"B": allowing for growth in performance between now and graduation, the work would be considered satisfactory professional planning work given the time and resources allocated to it. Assertions are correct; arguments are persuasive. Mastery of course concepts is evidenced. Errors in language usage, attribution, calculation and/or formatting are minimal.

"C": even allowing for growth in performance between now and graduation, the work would be considered less than satisfactory in a professional planning environment. There may be errors in fact or in understanding of course concepts. Arguments may not be convincing; there may be multiple errors in language usage, grammar, attribution, calculation and/or formatting.

"D": the work does not meet expectations for graduate students. The core prompts in the assignment may not be followed; arguments may be hard to understand or may ignore key lessons understood broadly in our profession and/or developed in the course; language usage, attribution, calculation and/or formatting may have serious flaws or widespread errors.

"F": the work does not address the assignment, fails to meet ordinary expectations for English language exposition, or appears to have been completed in a manner violating the Institute Honor Code.

Any assignment received electronically by 11:59pm on the announced due date will be considered on time. Please take precautions to make multiple copies of files related to your coursework; we have sympathy for problems related to computer malfunctions or lost materials, but can offer no grading concessions. Late submissions will only be permitted under extenuating circumstances and with prior permission of the instructor. Assignments due for presentation during particular class sessions must be handed in during that meeting.

Those with bona fide illness or serious family problems should make this known, provide documentation and seek suitable arrangements at the earliest possible date. Such personal crises are the only acceptable justifications for the Incomplete grade.

Communicating with the instructor: Office hours and contact information provided above.

Please use the course Canvas site to submit assignments and hand-in hard copies in class. Do not send assignments by e-mail or fax. Name your files with identifiers that are unique (eg. StakeholderAnalysis.Jones.8Feb08.pdf), combine all graphics, spreadsheets and text into one file, and submit in a standard software format (.doc or.pdf). Certain course materials and readings are available from the Canvas site.

Academic Honor Code and Student Code of Conduct: The Georgia Tech Academic Honor Code (http://www.catalog.gatech.edu/rules/18b.php) and Student Code of Conduct (http://www.catalog.gatech.edu/rules/19b.php) and the Rollins School of Public Health Student Honor and Conduct Code

(http://www.sph.emory.edu/cms/current_students/enrollment_services/honor_code.html) outline each institution's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading these two documents fully and for living up to them. Among the Codes' provisions are expectations about unauthorized access, unauthorized collaboration, plagiarism, false claims of performance, grade alteration, falsification, forgery and distortion. You should be absolutely clear in indicating when you have used ideas or words that are not your own. You are permitted to discuss the written assignments in this course with your fellow classmates, but, except for group assignments, you should not collaborate on your submissions. If you are unclear about the boundaries, ask the instructor or assume that the joint action in question is not allowed.

Students with Disabilities: Students with disabilities needing academic accommodation should provide documentation to the Office of Disability Services at Ga Tech (http://www.adapts.gatech.edu/) and bring an accommodation letter or comparable Emory documentation to the instructor indicating the

nature of accommodations required. This should be done within the first week of class or as soon as possible after a new disability condition arises. All effort will be made to provide reasonable accommodation.

Course Evaluations: All students are expected to complete on-line course evaluations at the end of the semester.

Logistics:

Transportation

- Emory/GT Shuttle: The Emory Shuttle provides convenient transportation from Georgia Tech to Emory University's Woodruff Circle. The Emory Shuttle operates Monday through Friday during fall and spring semesters. During the summer term, the Emory shuttle is not in operation; however, Emory's Cliff Shuttle is available. The Emory Cliff Shuttle provides service between the main campus and Emory's Midtown Hospital, which is close to Georgia Tech's main campus. The latest departure scheduled is 7:41pm. Please check the schedule to plan your trip http://pts.gatech.edu/ride/Pages/EmoryShuttle.aspx.
- MARTA
 - OGT: Georgia Tech is serviced by two MARTA rail stations: Midtown and North Avenue Station. These stations can be accessed by the red and gold metro lines. The Tech Trolley provides service to and from the Midtown MARTA Station. https://pts.gatech.edu/campustransit The North Avenue MARTA Station is only a brief walk to east campus. http://www.itsmarta.com/Midtown.aspx
 - Emory: The Rollins School of Public Health is most accessible by the #6 bus that runs between the Lindbergh and Inman Park train stations. http://www.itsmarta.com/6.aspx

<u>Parking</u>

- GT: Students without a GT parking permit will need to park in one of the 'pay parking' or 'pay by cell' spaces on campus. Area 1 and Area 2 are the closest 'pay parking' lots to the classroom.
 http://pts.gatech.edu/sites/default/files/documents/map 20 visitor cs6.pdf
 . We encourage students to carpool and/or use alternative modes of transportation.
- Emory: Students without an Emory parking pass will need to park in the visitors lot adjacent to
 the Michael Street Parking Deck (550 Houston Mill Road) next door to Rollins.
 https://www.sph.emory.edu/about/directions-maps/index.html. This is a paid lot, so we
 encourage you to carpool and/or use alternative modes of transportation.

<u>Wireless</u>

- @ GT: Wireless is not provided unless students pay for a guest account.
- @ Emory: Emory students will login as they normally do. GT students will login through the guest login interface.

Entering the Building

• GT: The Old Civil Engineering Building will be open for the duration of the class session. The main entrance (221 Bobby Dodd Way NW) and the side entrance on Bobby Dodd Way are publicly accessible between 8 and 5 pm. Access after 5 can be arranged with special permission but students will need a Ga Tech ID.

Figure 1. Entrance to the Old Civil Engineering Building



• Emory: The Claudia Nance Rollins Building (1518 Clifton Road, Atlanta, Georgia 30322) will be open for the duration of the class session. If you plan on working with Emory students at this facility outside of scheduled class time, please note that the doors lock at 5pm and can only be accessed with an Emory ID.

Students leaving class early

For students who have class conflicts and have to travel across campuses, I will permit you to leave class 15 minutes early. This will be a more realistic commute time for you. Please send me an email that you need to leave early and the class that you have the conflict with.

Considering that this will happen in almost half of your classes for the semester, I will require you to attend one activity that would serve as a class meeting substitute. The easiest option would be to attend a Healthy Places Research Group (HPRG) meeting. The HPRG meetings occur one Tuesday a month between 7:30 - 9 am. The first meeting happens on September 25th with others yet to be scheduled. I will post the event details and opportunities on Canvas as I become aware of them. Alternatively, if there are other events/seminars that you are aware of and are applicable to this class, please let me know so I can approve it and share the information with the class.

Deliverable

Write a single-spaced, 1-2 page reflection on the presentation and it's applicability to the class. Your reflection should include the following: Introduction, Summary, Strengths, Weaknesses, Takeaways for Practice.

CP6850C/EH 584: Public Health and Built Environment Semester Schedule

(Subject to minor changes but students will be notified in a timely matter)

Date	Week	Place	Topic	Activity	Required Readings	Supplementary Readings
8/22	1	GT	Course Introduction	Boonkeut, G., Williams, D., & Kanopy. (2014). Unnatural causes. Place matters (Video)	 Textbook Chapter 1 Corburn, J. (2004). Confronting the Challenges in Reconnecting Urban Planning and Public Health. American Journal of Public Health, 94(4), 541-546. 	 Kent, J. L., & Thompson, S. (2014). The Three Domains of Urban Planning for Health and Wellbeing. CPL bibliography, 29(3), 239-256. doi:10.1177/0885412214520712 Ross, C. L., Orenstein, M., & Botchwey, N. (2014). "Public Health and Community Planning 101" in Health impact assessment in the united states. Retrieved from https://ebookcentral.proquest.co m
8/29	2	Emory	Social Determinants of Health	Lecture: Urban Planning and Public Health- Historical Connections	 Galea, S., Freudenberg, N., & Vlahov, D. (2005). Cities and population health. Social Science & Medicine, 60(5), 1017-1033. doi:http://dx.doi.org/10.1016/j.socscimed.2004.06.036 Braveman, P., Egerter, S., & Williams, D. R. (2011). The Social Determinants of Health: Coming of Age. Annual Review of Public Health, 32(1), 381-398. doi:10.1146/annurev-publhealth-031210-101218 	 Botchwey, N. D., Falkenstein, R., Levin, J., Fisher, T., & Trowbridge, M. (2014). The Built Environment and Actual Causes of Death: Promoting an Ecological Approach to Planning and Public Health. Journal of Planning Literature, 30(3), 261-281. doi:10.1177/0885412214561337 Braveman, P., & Gottlieb, L. (2014). The Social Determinants of Health: It's Time to Consider the Causes of the Causes. Public Health Reports, 129(1_suppl2), 19-31.

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9/05	3	Emory	Vulnerable Populations	Guest Speaker: Christopher Kochtitzky	1. 2.	Textbook Chapter 9 Mechanic, D., & Tanner, J. (2007). Vulnerable People, Groups, And Populations: Societal View. Health Affairs, 26(5), 1220-1230. doi:10.1377/hlthaff.26.5.1220	3.	Braveman, P. A., Cubbin, C., Egerter, S., & et al. (2005). Socioeconomic status in health research: One size does not fit all. JAMA, 294(22), 2879-2888. doi:10.1001/jama.294.22.2879
9/12	4	GT	Air Quality	Students: Transportation Planning	1. 2.	Textbook Chapter 4 Grabow, M. L., Spak, S. N., Holloway, T., Stone, B., Jr., Mednick, A. C., & Patz, J. A. (2012). Air Quality and Exercise- Related Health Benefits from Reduced Car Travel in the Midwestern United States. Environmental Health Perspectives, 120(1), 68-76.	3.	Gallagher, J., Baldauf, R., Fuller, C. H., Kumar, P., Gill, L. W., & McNabola, A. (2015). Passive methods for improving air quality in the built environment: A review of porous and solid barriers. <i>Atmospheric Environment, 120,</i> 61-70. doi:https://doi.org/10.1016/j.atmo senv.2015.08.075
9/19	5	GT	Physical Activity and Walkability Assessments	Students: Trail, Bike, and Pedestrian Infrastructure Plans	1. 2.	Textbook Chapter 2 Sallis, J. F., Cervero, R. B., Ascher, W., Henderson, K. A., Kraft, M. K., & Kerr, J. (2006). An ecological approach to creating active living communities. <i>Annual Review of Public Health</i> , <i>27</i> (1), 297-322. doi:10.1146/annurev.publhealth. 27.021405.102100	3. 4.	<u>'</u>
9/26	6	GT	Food Access and Health	Students: Comprehensiv e Plans	1. 2.	Textbook Chapter 3 Sadler, R. C., Gilliland, J. A., & Arku, G. (2016). Theoretical issues in the 'food desert' debate and ways forward. GeoJournal, 81(3),	3.	Carroll-Scott, A., Gilstad-Hayden, K., Rosenthal, L., Peters, S. M., McCaslin, C., Joyce, R., & Ickovics, J. R. (2013). Disentangling neighborhood contextual associations with child body mass

						443-455. doi:10.1007/s10708- 015-9634-6		index, diet, and physical activity: The role of built, socioeconomic, and social environments. <i>Social Science & Medicine</i> , <i>95</i> , 106-114. doi:https://doi.org/10.1016/j.socs cimed.2013.04.003
10/03	7	Emory	Social & Therapeutic Dimensions of Greenspace	Guest Speaker: Evan Mallen Students: Climate Action Plans/ Green Infrastructure Plans	1. 2.	Textbook Chapter 15 Coutts, C., & Hahn, M. (2015). Green Infrastructure, Ecosystem Services, and Human Health. International Journal of Environmental Research and Public Health, 12(8), 9768-9798. doi:10.3390/ijerph120809768	3.	Gómez-Baggethun, E., & Barton, D. N. (2013). Classifying and valuing ecosystem services for urban planning. Ecological Economics, 86, 235-245. doi:https://doi.org/10.1016/j.ecolecon.2012.08.019
10/10	8	GT	Healthy Community Plan Midterm Presentations; Midterm reports due	Student team presentations		Midterm presentations		
10/17	9	Emory	Spatial Access to Healthcare	Students: Community Health Needs Assessments	2.	Syed, S. T., Gerber, B. S., & Sharp, L. K. (2013). Traveling Towards Disease: Transportation Barriers to Health Care Access. <i>Journal of Community Health, 38</i> (5), 976-993. doi:10.1007/s10900-013-9681-1 Dai, D. (2010). Black residential segregation, disparities in spatial access to health care facilities, and late-stage breast cancer diagnosis in metropolitan Detroit. Health & Place, 16(5), 1038-1052.	3.	Chaiyachati, K. H., Hubbard, R. A., Yeager, A., Mugo, B., Shea, J. A., Rosin, R., & Grande, D. (2018). Rideshare-Based Medical Transportation for Medicaid Patients and Primary Care Show Rates: A Difference-in-Difference Analysis of a Pilot Program. Journal of General Internal Medicine, 33(6), 863-868. doi:10.1007/s11606-018-4306-0

				doi:https://doi.org/10.1016/j.heal thplace.2010.06.012				
10/24	10	GT	Healthy Sites (Schools, Homes, Workplaces and Healthcare Settings) Guest Speaker Jennifer DuBose Students: Healthy Healthy Systems	Textbook Chapters 11, 12, 13, 14				
10/31	11	Emory	Data and Tools for Healthy Community Planning					
11/07	12	GT	Emerging Lecture and student-led discussion					
11/14	13	Emory	Cumulative Quiz					
11/21	14	Emory	Healthy Community Plan Final Presentations; Final Reports due					
11/28	15	No Class	THANKSGIVING BREAK					