

CITY AND REGIONAL PLANNING PROGRAM
COLLEGE OF ARCHITECTURE
GEORGIA INSTITUTE OF TECHNOLOGY

ENVIRONMENTAL HEALTH
ROLLINS SCHOOL OF PUBLIC HEALTH
EMORY UNIVERSITY

Instructors: Nisha D. Botchwey, PhD, MCRP, MPH

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Office Location: COA East, Suite 204

Office Hours: Wednesdays, 1-2:30pm

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by appointment

CP6850C/EH 584: Public Health and Built Environment

Fridays, 8:05-9:55am

GIT: Architecture (West) 107

Emory: Claudia Nance Rollins Building (CNR), Room 1051

* *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. 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, mini-lectures, 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 feelings, 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 one textbook, available from the Georgia Tech bookstore on Spring Street (or from various online vendors):

REQUIRED

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

Additional materials will be made available through the T-Square site (<https://t-square.gatech.edu>). Emory students will be given access to GT's T-square 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:

Topical Instruction (25% of course grade) Students will participate in teams of 5-6 students and complete both article critiques and class facilitation. Effective collaboration on both products is critical as it is a skill necessary for interdisciplinary practice and will be assessed through peer review evaluations.

* *Article Critique* (8% of course grade) Student teams will complete a written article critique on two articles of the set posted on t-square. The critique should compare and contrast the selected articles relevant to the session's focus. The 3-5 page written critique will include the following components:

1. Introduction: provides an overview of the articles' purpose and main argument and offers the writers' thesis regarding the articles' strengths and weaknesses.
2. Summary paragraph: briefly reviews the articles' strengths and weaknesses regarding framework, research question, methods, use of evidence and or conclusions.
3. Comparison of the papers
4. Critique of noteworthy dimensions of the papers, especially relevant to promoting healthy places.
5. Conclusion: presents commentary on the articles' overall usefulness in replicating or informing built environment and health research and application, and the semester assignment.

* *Online discussion* (4% of course grade) The student team will also moderate the online discussion of the articles on t-square from Monday through Thursday preceding the assigned class session. The article critique must be handed in to the professors at the beginning of the assigned class and integrate highlights from this forum.

* *Class Session Facilitation* (8% of course grade) Each class session will include a student led exercise that allows the class to practice skills important to the assigned topic. Student teams have 90 minutes to facilitate the class' ability to exercise techniques that promote population health regarding the

assigned topics and based on the week's readings. Student teams are expected to address each of the 'key points' from the assigned chapters in their session facilitation. They may reference the articles included in the critique and the remaining articles that serve as supplemental reading. Teams will submit summary notes for the class facilitation including any handouts or powerpoints, and post these resources at the end of the class day to the topic discussion on t-square.

* *Peer Review* (5% of course grade) Each member of the topical instruction team will be evaluated by their peers to assess their contributions to the above three components of the assignment. Peer Reviews will not be shared with individual students so as to preserve the anonymity of the feedback from individual reviewers.

Built Environment and Public Health Scavenger Hunt (10% of course grade) The built environment- the roads, homes, schools, parks, businesses, places of worship and other man-made elements occupying the human environment- holds an important influence in our lives. How we design our communities affects our health by shaping whether we choose to walk or drive to destinations; time spent commuting; and ultimately how much physical activity we get. It affects the number of injuries from automobiles or pedestrian accidents and our access to food from a garden versus a fast-food drive through. The purpose of this exercise is to demonstrate the relationship between design and building healthy communities. Teams of approximately five students will each complete an exercise adapted from the CDC's Healthy Community Design Initiative that involves the completion of six daily tasks in two different environments in the Atlanta area: Chamblee and Decatur. Additional information on this assignment is available in the handout that will be provided prior to the activity.

The scavenger hunt is scheduled for Friday evening September 18th starting at 5:30pm in Decatur ending with a debrief session at Raging Burrito from 6:30 to 7:30pm. Students unable to participate on the 18th are expected to complete the exercise independently at some point prior to class on 9/25.

In addition to participating in the debrief session, students are expected to submit 500-word reflection on the Chamblee and Decatur portions of the scavenger hunt, the different methods (Google Earth vs. on-the-ground) applied to complete the tasks. Comment on the strengths and weaknesses of both and their applicability to other built environment and health assessments. Include pictures as relevant to the text. Submit this assignment to T-Square under assignments.

CDC Museum Tour Reflection (10% of course grade) Students will participate in a CDC Museum Tour and submit a 500-word reflection on the public health and built environment lessons from "Resettling in America: Georgia's Refugee Communities". What are the critical public health and built environment issues that are critical to the health of this population? Students are expected to incorporate their own independent research, readings from other sessions, and current events. More information on the tour is available here: <http://www.cdc.gov/museum/>

Healthy Communities Plan (50% 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 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 (10% 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 5-10 page paper documenting their progress as presented in the class. Students will be asked to additionally consider how the respective community can be engaged to in the interventions they will propose.
- 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 15 minutes with 5 minutes for questions and discussion. Presentations will be held on 11/13 and 11/20. Final Reports are due to t-square on 11/23.

Participation (5% of course grade) Students are expected to actively engage throughout the semester through the on-line discussions, guest lectures, and policy and place panels. Participation in the on-line discussions is measured by constructive comments that help move the topic specific discussions scheduled for the first half of the semester forward. Participation for the guest lectures and panels is measured by engagement in the discussion period of those classes.

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 11:55pm 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. Submissions after 11:55pm on the due date are downgraded 1/4 letter grade; submissions more than one week late are downgraded a full letter grade. Submissions received after the graded assignment has been returned to the class will receive the grade of F. 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 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 T-Square 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.rtf), combine all graphics, spreadsheets and text into one file, and submit in a standard software format (.doc or.pdf). Certain course materials are available from the T-Square 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 Access Disabled Assistance Program for Tech Students (<http://www.adapts.gatech.edu/>) and bring an ADAPTS 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
 - GT: 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. The North Avenue Station is only a brief walk to east campus. http://pts.gatech.edu/ride/metro_transit/Pages/MARTA.aspx
 - Emory: The Rollins School of Public Health is most accessible by the #6 bus (<http://itsmarta.com/6-w.aspx>) that runs between the Lindbergh and Inman Park train stations.
- Parking
 - 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 2 and Area 4 are the closest 'pay parking' lots to Clough (see map <http://pts.gatech.edu/PublishingImages/ParkingZones1314.jpg>) 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 next door Rollins. This is a pay lot, so we encourage you to carpool and/or use alternative modes of transportation.

Wireless

- @ GT: GT students login through their user ID and network passcode. Emory students will also log in through the assigned user ID and password provided.
- @ Emory: Emory students will login as they normally do. GT students will login through the guest login interface.

Entering the Building

- GT: The College of Architecture and other buildings scheduled for meetings will be open for the duration of the class session.
- Emory: The Claudia Nance Rollins Building 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

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

- 8/21 (@ GT, GT only) Public Health and Built Environment Timeline to Present
Place Matters, California Newsreel
- Readings: *Making Healthy Places* Chapters 1, 21, 24
- 8/28 (@GT) Introductions
Social Determinants of Health
Public Health and Built Environment Timeline to Present, and Forecast
Syllabus and Assignments Review, Sign-up for Student Presentations
- Readings: *Making Healthy Places* Chapters 1, 21, 24
- 9/4 (@GT) Behavior Choices and Epidemiology (Health Behavior Theories and Logic Models)
Sign-up for Healthy Community Plan Project Teams
- Readings: *Making Healthy Places* Chapter 17
Articles as assigned, see t-square
 - Students: Deepti Silwal: silwaldeepti@gmail.com, Shelly Price: sprice4@alumni.nd.edu,
Briana Rinderknecht: briana.rinderknecht@gmail.com
- 9/11 (@GT) Physical Activity and Injury (and Walkability Assessments)
- Readings: *Making Healthy Places* Chapters 2, 5, 10
Articles as assigned, see t-square
 - Students: Emilie McClintic: emilie.mcclintic@emory.edu, Shirelle Haugh:
shirelle.haugh@emory.edu, Ayrenne Adams: ayrenne.adams@emory.edu, Alex Hanson:
mhanson34@gatech.edu, Allie Miller: amiller312@gatech.edu, Bonwoo Koo:
bkoo34@gatech.edu
- 9/18 (@GT) Air (Measuring Air Quality)
- Readings: *Making Healthy Places* Chapters 4, 22
Articles as assigned, see t-square
 - Students: Zelalem Adefris: zelalem.adebris@emory.edu, Shikai Zhou:
szhou94@gatech.edu, Kim Tatum: kim.tatum@gatech.edu, Mike Garber:
Michael.david.garber@emory.edu, Alysa Moore: alysa.moore@emory.edu
- 9/18 (@Decatur Marta Station) 5:30-7:30pm Scavenger Hunt (see assignment)
- 9/25 (@GT) Water (Green Infrastructure Planning)
- Readings: *Making Healthy Places* Chapter 6
Articles as assigned, see t-square
 - Students: Caitlin Donato: caitlin.donato@emory.edu, Grete Wilt: grete.wilt@emory.edu,
Sarah Jane Bonn: sbonn3@gatech.edu, Leila Heidari: Leila.marie.heidari@emory.edu, Erik
Woodworth: erik.woodworth@gatech.edu, Sarah Whitaker: sarah.henry.whitaker@emory.edu
- 10/2 (@GT) Food (Mapping Food Access)
- Readings: *Making Healthy Places* Chapter 3
Articles as assigned, see t-square
 - Students: Laura Elaine Harker: laura.harker@emory.edu, Emily Elizabeth Szwiec:

emily.szwiec@emory.edu, Katherine Mitchell: kmitchell@gatech.edu, Revathi Veriah: rveriah3@gatech.edu, Angelica Yanten: angelica.yanten@gatech.edu, TJ Funso: tfunso3@gatech.edu

10/9 (@Emory) Healthy Community Plan Midterm Presentations

- Readings: *Making Healthy Places* Chapter 19, 20

10/16 (@Emory) Vulnerable Populations

- Readings: *Making Healthy Places* Chapters 7, 8, 9
Articles as assigned, see t-square
- Guest Speaker: Christopher Kochtitzky (CDC), Betsy Kagey (Emergency Response, GDPH) (invited)

10/23 (@Emory) Built Environment and Public Health Policy

- Readings: *Making Healthy Places* Chapters 16, 18
Articles as assigned, see t-square
- Guest Speaker: Beth Stephens (GA Watch), Renee Ray (ARC)

10/30 (@Emory) Sites (Schools, Homes, Workplaces and Healthcare Settings)

- Readings: *Making Healthy Places* Chapters 11, 12, 13, 14, 15
Articles as assigned, see t-square
- Guest Speaker: Tami Thomas-Burton (EPA), Kathleen Brownlee (Purpose Built Communities) Jennifer DuBose (SimTigrate Design Lab)

11/6 (@Emory) Workshop Projects together with teams and faculty in the classroom

11/6 (@CDC Museum) 9:30-11:30am | Resettling in America: Georgia's Refugee Communities
<http://www.cdc.gov/museum/>

- Readings: *Making Healthy Places* Chapter 23

11/13 (@EastLake/DrewCharterSchool) Tour of East Lake Community led by Danny Shoy, East Lake Foundation President

11/20 (@Emory) Healthy Community Plan Final Presentations (**Extended Session to 11am**)

**No class after Thanksgiving due to scavenger hunt, CDC Museum Tour and Community Tour.

*** Students are encouraged to participate in the **Healthy Places Research Group** held once a month on Tuesdays from 7:30-9:00am. The Fall 2015 Sessions are scheduled for September 1st, October 6th and November 13th.