Class details  
Globalizing Social Activism: Sustainable Development in Urban Areas (UPADM-GP 9217/SCA-UA 9717/ ENVST-UA 9417)

Spring semester 2014, Wednesdays, 9 am start time

NYU-DC classroom 205B or Washington, DC field trips (alternating weeks)

Instructor Details  
Victoria Kiechel  AIA  LEED AP+  
Email: vk37@nyu.edu; telephone: 202-363-7668  
Office hours: after class and upon request

Prerequisites  
N/A

Class Description  
For the first time in world history, the number of people living in urban areas exceeds the number of people living in rural areas. In acknowledging the urgent demands of our urban present and future, this course examines the social, economic, and environmental dimensions of contemporary cities. Because projections show that most population growth will continue to take place in and around cities, this course makes the case for sustainable development as a way to mitigate the impacts of human growth. We will explore what is, and what could be, by discussing these themes: urban sprawl, slums and slum typology, green urban planning, air and water quality, new paradigms for energy/water/waste infrastructure, green building, sustainable materials, and whole systems design. We will consider how to measure sustainability and discuss the effectiveness of sustainability indicators. We will examine governance structures, social entrepreneurship, and the power of information technology and social networks in promoting sustainable development and the diffusion of ideas. We will also highlight the transformative role of art and culture in our sustainable urban future.

Desired Outcomes  
To describe the impact of cities on their regional ecologies and the global ecology;  
To analyze the components of and barriers to urban sustainability and sustainable design;  
To be able to apply this understanding to the development of solutions to real-world urban problems;  
To be able to quantify or measure progress towards solutions.
Assessment Components and Expectations

Your grade depends on the following:

Class participation: 20%

Assignments: 40% total, or 20% for each of two interim assignments furthering the work of the semester’s project. The project will involve the sustainable repurposing of buildings and/or infrastructure in a Washington, DC neighborhood, to be selected by agreement between the instructor, the student, and the project patron. Options under consideration includes sites within the Capital Waterfront Business Improvement District, OR Dupont Circle’s underground abandoned trolley station, OR another District real-world project yet to be determined.

Mid term examination: 20%

Final project presentation and report: 20%

Failure to complete or submit any of these required components results in failure in the class.

Grade A: The student makes excellent use of empirical and theoretical material and offers well-structured arguments in his/her work. The student writes comprehensive essays / exam questions and his/her work shows strong evidence of critical thought and extensive reading.

Grade B: The candidate shows a good understanding of the problem and has demonstrated the ability to formulate and execute a coherent research strategy.

Grade C: The work is acceptable and shows a basic grasp of the research problem. However, the work fails to organize findings coherently and is in need of improvement.

Grade D: The work passes because some relevant points are made. However, there may be a problem of poor definition, lack of critical awareness, poor research.

Grade F: The work shows that the research problem is not understood; there is little or no critical awareness and the research is clearly negligible.

Grade Conversion

NYU Washington, DC uses the following scale of numerical equivalents to letter grades:

- 100-94: A
- 93-90: A-
- 89-87: B+
- 86-84: B
- 83-80: B-
- 79-77: C+
- 76-74: C
- 73-70: C-
- 69-67: D+
- 65-66: D
- below 65: F
Attendance Policy

NYU Washington, DC has a strict policy about course attendance. **No unexcused absences are permitted.** All medical-based absence requests MUST be presented by the student to the Program Manager for Student Life (Candice Clawson) before or during the class that is missed. Candice can help arrange doctor’s appointments. In case of a longer-lasting illness, medical documentation must be provided. **All non-medical absence requests must be presented by the student to the Program Manager for Academic Affairs (Lauren Sinclair).** Non-medical requests should be made in advance of the intended absence.

Unexcused absences will be penalized by deducting 3% from the student’s final course mark. Unexcused absences from exams are not permitted and will result in failure of the exam. If you are granted an excused absence from examination (with authorization, as above), your instructor will decide how you will make up the assessment component, if at all (by make-up examination, extra coursework, or an increased weighting on an alternate assessment component, etc.).

NYU Washington, DC expects students to arrive to class promptly (both at the beginning and after any breaks), to be attentive, and to remain for the duration of the class. If full class attendance becomes a problem, it is the prerogative of each instructor to deduct from the final grade for late arrival and early departure. Being more than 10 minutes late counts as an unexcused absence.

Please note that for classes involving a **field trip or other external visit**, transportation difficulties are never grounds for an excused absence. It is the student’s responsibility to arrive at the announced meeting point in a punctual and timely fashion. Staff members may always be reached by cell phone for advice regarding public transportation.
Late Submission of Work

(1) Any written work due should be submitted before the beginning of the class session by email, in modifiable MS Word format or equivalent, as an attachment sent to vk37@nyu.edu. Please use this naming convention for your work: yourname_essaynumber_date.

(2) Late work should be submitted in digital form as above to the instructor and also in person in hard copy format to the instructor or to the Program Manager for Academic Affairs (Lauren Sinclair), who will write on the essay or other work the date and time of submission, in the presence of the student. Work cannot be left for Lauren under the door or on her desk, in her absence. If Lauren is not in her office, another member of the administrative staff can accept the work and write the date and time of submission on the work, again only in the physical presence of the student.

(3) Work submitted within 5 weekdays after the submission time without an agreed extension receives a penalty of 10 points on the 100 point scale.

(4) Without an approved extension, written work submitted more than 5 weekdays following the session date fails and is given a zero.

(5) Please note: end of semester essays must be submitted on time.

(6) If for whatever reason you feel you cannot submit any written work in time, you should discuss this with Lauren.

(7) Students who are late for a written exam have no automatic right to take extra time or to write the exam on another day.

Students with Disabilities

Accommodations are available for students with documented disabilities. Please contact the Moses Center for Students with Disabilities at 212-998-4980 or see their website [http://www.nyu.edu/life/safety-health-andwellness/students-with-disabilities.html] for further information.
Plagiarism Policy The presentation of another person’s words, ideas, judgment, images or data as though they were your own, whether intentionally or unintentionally, constitutes an act of plagiarism.

NYU Washington, DC takes plagiarism very seriously; penalties follow and may exceed those set out by your home school. All your written work must be submitted in electronic form to the instructor. Your instructor may check for plagiarism or ask you to sign a declaration of authorship form.

It is also an offense to submit work for assignments from two different courses that is substantially the same (be it oral presentations or written work). If there is an overlap of the subject of your assignment with one that you produced for another course (either in the current or any previous semester), you MUST inform your professor.

For guidelines on academic honesty, clarification of the definition of plagiarism, examples of procedures and sanctions, and resources to support proper citation, please see:
http://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/academic-integrity-for-students-at-nyu.html
http://gls.nyu.edu/page/gls.academicintegrity
http://cas.nyu.edu/page/academicintegrity

Required Text(s) We will have one required hard copy text: The Sustainable Urban Development Reader, 2nd edition (Routledge, 2008), edited by Stephen Wheeler and Timothy Beatley. If you would like to own it, I recommend its purchase as a used book through amazon.com, which has many copies available from various booksellers for a reasonable price; otherwise, you may access it through the NYU reading room. All other reading will be available online or in PDF format as posted to our NYU Classes site.

Supplemental Text(s) (not required for purchase) The instructor will issue and discuss the supplemental bibliography during the semester.

Internet Research Guidelines Open source internet research resources, while helpful, are not entirely reliable; this includes sources such as Wikipedia. Quotes or attributions from these sources will result in a reduced grade on written work.

Additional Required Equipment We’ll do as many field visits as possible during the semester. Please purchase a small notebook or sketchbook for taking notes and sketching during class. We will engage in occasional mapping and diagramming exercises. Utrecht Art Supply, a good source, is a few blocks away, near 13th and I Streets, NW.

Session 1 Wednesday, February 5 What is sustainability? Components and challenges in urban development. Measurement systems and indicators. Concepts: whole systems thinking; adaptation; governance.

The order of sessions is subject to change. Expect the addition of field trips during class sessions.
### Session 2
**Wednesday, February 12**

**Theory and practice in urban design and planning.** Sprawl and SmartGrowth; existing cities, new towns, and visionary development and innovation.

Case studies: lower Manhattan; Washington, DC.

**Field visit.**

**Readings:**
- The Sustainable Urban Development Reader, pp. 87-111 (“Land Use and Urban Design”); pp. 425-455 (“Urban Sustainability at the City and Regional Scale”)

### Session 3
**Wednesday, February 19**


**In the classroom.**

**Readings:** The Sustainable Urban Development Reader, pp. 32-37 (Jane Jacobs: “Orthodox Planning and the North End”); pp. 197-208 (“Fighting Poverty and Environmental Injustice in Cities”)

Garrett Hardin’s “Tragedy of the Commons” available through [http://www.sciencemag.org/content/162/3859/1243.full](http://www.sciencemag.org/content/162/3859/1243.full)

Mike Davis, Planet of Slums, portions online through [http://digmybook.com/preview/1844670228/Planet-of-Slums](http://digmybook.com/preview/1844670228/Planet-of-Slums)

Visit: [http://www.ashoka.org/fellows](http://www.ashoka.org/fellows) and read and review the profiles for
- Ravi Agarwal [http://www.ashoka.org/fellow/2604](http://www.ashoka.org/fellow/2604)
- Anna Zucchetti [http://www.ashoka.org/fellow/3721](http://www.ashoka.org/fellow/3721)
- Antonio Luiz Batista de Macedo [http://www.ashoka.org/fellow/3250](http://www.ashoka.org/fellow/3250)
- Mathias Craig [http://www.ashoka.org/mcraig](http://www.ashoka.org/mcraig)
- Radoslaw Gawlik [http://www.ashoka.org/fellows/radoslaw_gawlik](http://www.ashoka.org/fellows/radoslaw_gawlik)
- Andy Lipkis [http://www.ashoka.org/alipkis](http://www.ashoka.org/alipkis)

Come to class prepared to talk about them with respect to the descriptive approach Ashoka adopts: The Problem, The Idea, The Strategy.

### Session 4
**Wednesday, February 26**

**Transportation and movement.** Systems, costs and benefits. Case studies: Curitiba, Brazil; Medellin, Colombia. **Field trip.**


**Session 5**

**Wednesday, March 5**

**Green buildings and sustainable housing.** Climate-responsive design in urban areas. Green building rating systems and mandates. Case studies and **field trip.**

**Readings:** The Sustainable Urban Development Reader, pp. 255-278 (“Green Architecture and Building”); pp. 397-426 (“Urban Sustainability at the Building and Site Scale”)

Hassan Fathy, Architecture for the Poor, excerpts on NYU classes.


Download and read the Living Building Challenge Standard at [https://ilbi.org/lbc/standard](https://ilbi.org/lbc/standard)


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**Session 6**

**Wednesday, March 12**

**Mid-term examination** and preview of coming attractions.

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**Session 7**

**Wednesday, March 26**

The National Capital Planning Commission (NCPC) ecoDistrict and the influence of the Portland, Oregon ecoDistrict model. **In the classroom.**

**Readings:**


- Tools
- Framework
- Overview
- Training + Consulting Services
- Pilot EcoDistrict Reports (2011)
- Toolkits (version 1.1)
- Making EcoDistricts (Academic Publication with Insight into the EcoDistrict approach)
- District Utility Analysis (Prepared by Compass Resource Management in partnership with PoSI)

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**Session 8**

**Wednesday, April 2**

**Water and water infrastructure.** The effect of cities on their regional ecologies and watersheds. The concept of low impact development (LID). The new water paradigm. **Field trip.**

**Readings:**

On the new water paradigm: from the Water Environment Research Foundation (WERF), “Integration Report” on NYU Classes

The Cascadia Green Building Council, “Towards Net Zero Water” on NYU Classes

Center for Neighborhood Technology, “The Value of Green Infrastructure” on NYU Classes
| Session 9 | Wednesday, April 9 | **Energy and energy infrastructure.** Sources, extraction, and impacts. Energy efficiency and renewable energy systems. Shared energy systems. Case studies. **Classroom.**
Other readings in “Energy” folder on NYU Classes. |
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| Session 10 | Wednesday, April 16 | **Materials and waste.** What is a green material? Hassan Fathy's Egyptian experiment. Life cycle assessment. Waste management case studies: Cairo, Kibera, and Mumbai. **Classroom.**
Other readings in “Materials” folder on NYU Classes. |
| Session 11 | Wednesday, April 23 | **The role of green space**, urban agriculture, parks. Biodiversity. Carbon sinks and global climate change. Food security in urban areas. **Field trip.**
Other readings in “Green Space” folder on NYU Classes. |
| Session 12 | Wednesday, April 30 | **Field trip** to discuss the role of green jobs/economy in the sustainable city. DC Deputy Mayor’s Office for Economic Development, Downtown Business Improvement District, or Federal City Council (TBD).
Other readings TBD. |
| Session 13 | Wednesday, May 7 | **Internet technology** and the power of information to motivate change. Global activism and IT infrastructure. **Classroom.**
Readings: As posted on NYU Classes, from Marcus Roth’s Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City. |
Other readings TBD. **Field trip.** |

**Final Presentation**
TBD.

**Classroom Etiquette**
Attention, engagement, respect.

**Required Co-curricular Activities**
See the week-by-week schedule, above.
Suggested Co-curricular Activities

TBD.

Your Instructor

Vicky Kiechel, AIA and LEED AP+, is a practicing architect, native Washingtonian, and the mother of two teenaged native Washingtonians. She works for the Cadmus Group, Inc., an environmental consultancy, on the development and implementation of green building policy for clients in the public (federal, state, and local) and private sectors. Her clients have included the US Green Building Council, US EPA, the states of Wisconsin and Arkansas, and the Appalachian Regional Commission. Vicky’s design work includes small-to-medium scale residential and institutional projects such as the Washington, DC offices of the Mexican-American Legal Defense and Educational Fund and the Maury Public Elementary School Library for the DC Capitol Hill Libraries Project, a public-private partnership. Vicky also teaches in the Global Environmental Politics Program at American University, where she was named Most Innovative Green Teacher of the Year in 2010. She holds degrees from Yale College; Oxford University, where she was a Rhodes Scholar; and the Harvard Graduate School of Design.