Course Syllabus

Sustainable Retrofits Syllabus

A6708
408 Avery

Adlerstein, FAIA Fall
2018

Description

This course will explore the response of the building industry to climate change, which presently advocates sustainable construction. We will discuss whether a stronger response is more appropriate - a reconsideration of the financial rewards of new construction in favor of the public benefits of preservation and sustainable retrofits. Students will develop public policy proposals to move this initiative forward.

Historic preservation and sustainable design are considerations generated by our ethical obligations to the future. The public has generally accepted the wisdom of historic preservation. Likewise, the American public is finally on the road towards accepting the wisdom of sustainable design, even within the preservation field. It is evolving into a required skill set. The acceptance of historic preservation required decades of education, and its success was the result of significant financial incentives offered by the public sector for the public good – primarily tax breaks.

The acceptance of sustainable design has also made significant, but very slow, progress in recent years. However, damaging events caused by climate change are moving the politics of sustainable design at an increasing speed. After over 20 years of inconclusive UN sponsored climate change conferences seeking a coordinated strategy to slow climate change (Rio in the 1990s, Kyoto in the 2000’s and Copenhagen in 2009) in recent years the world has witnessed an increased volume of very damaging weather events. These forces have created a shared sense of urgency. The tens of thousands of refugees that are moving away from the deserts of the Middle East brought the issue to everyone’s front door. The refugees helped create cooperation at the UN climate conference in Paris in December 2015. Finally, consensus was reached on a climate change agreement.

That agreement demands a strong response from all countries and industry groups, however, the building industry, as we know, is responsible for a large share, some say the majority share, of the ongoing carbon production. We have
convincing ourselves that our best contribution to save the planet is our commitment to greener buildings. This may be partially accurate, but perhaps not.

Objective

The objective of this course is to explore whether building greener buildings is the best we can do to assure our future, or is building greener helpful, but building less might be necessary, much less. This course will explore the concepts of preserve/retrofit vs new green construction on a conceptual basis, and use as a case study the recent renovation/retrofit of the United Nations compound.

Assignments

Each class will have 50 – 100 pages each week of required reading. An Abstract and a Final Policy Strategy (about 3,000 words) will be required.

Grades

Class Participation 20%

Assignments Abstract 30%

Final Strategy 50%

Schedule

October 25 Public Architecture and Overview of the UN Renovation

Public architecture – managing the execution of public projects for the public good; Overview of the course


http://global.ctbuh.org/resources/papers/download/2483-united-nations-secretariat-renovation-of-a-modernist-icon.pdf (Links to an external site.)
November 1  Early Years of UN Planning, and the Decision to Retrofit

1948 – 1952 A Workshop for Peace; 1970 – 1998 the decline of facility maintenance, the cold war; Does the UN need this building? Does the world need the UN? Does NY want the UN?


Early studies; dirty tours; security risks; Mayor Gulliani, costs of swing space, NYC vs Geneva vs other places; organizing for a multiyear project


George Dudley -- A Workshop for Peace: Designing the UNHQ -- Pages 1 to 57.pdf

https://www.amazon.com/Workshop-Peace-Designing-Nations-Headquarters/dp/0262041375 (Links to an external site.)

Renewal 1999 -2015.zip

http://www.un.org/ga/search/view_doc.asp?symbol=A/55/117 (Links to an external site.) (Links to an external site.) (Links to an external site.) (Links to an external site.) (Links to an external site.)

November 8  Project Approval/Sustainable Retrofits

2007 The benefits of the project; approved budget and funding mechanism; the politics and failure of DC5; selecting staff, consultants, the CM and contractors; critics, press, politicians; NYC code issues and Sovereignty; phasing strategies, Climate Change USGBC LEEDS , BREEN,CASPE; role of the UN in climate discussion
Abstracts submitted

Guest speaker: Professor Andy Golubitsky

**Required Reading:** Assessing the Carbon-Saving Value of Retrofitting versus demolition and new construction at the United Nations Headquarters, by Michael Adlerstein, 2016. (21 pages)

UN Embodied Carbon Report _26aug2016_vidaris_rev.pdfColumbia Final Syllabus Sustainable Retrofits.docx

**November 15**  
**Design and Historic Preservation**

Retaining functionality and traditional circulation; Security Council protocols; Secretary-General’s Office; General Assembly seating problems, Trusteeship Council preservation; electronics in the Conference Rooms; design by donation; protocols vs costs of labor (robotic cameras, simultaneous interpretation); the glass curtain wall, accessibility codes

Retaining the character defining characteristics in a dangerous world; reshaping the conference rooms for better intimacy and accessibility; restoring the magical materials of the 50’s – formica, naugahyde, aluminum for stainless;


Victoria Newhouse -- Wallace K. Harrison -- Pages 104 to 143.pdf

https://www.amazon.com/Wallace-Harrison-Architect-Victoria-Newhouse/dp/0847806448 (Links to an external site.) (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.

**Required Reading: TBD**

**November 16**  
**Field Trip to the United Nations**

**November 29**  
**The Art Collection, Security and Technology**

The growth of the value and consequences of the collection; the selection of art “gifts”; art during construction; Moving from 1950’s mechanicals the state of the art; broadcast and documentation systems; robotic cameras; window shades vs blinds; data centers; Con Ed electric vaults;
NYC Fire and emergency codes; attacks on the UN overseas – raising the blast levels; the structural redesign; hardening the edge; redesign of the service drive; the caterpillar tent

December 6       Final Strategy Presentations

Bibliography

Books and articles:


   ISBN-10: 1859849016


7. UN at 70: how money and modernist architecture came together at the UN headquarters in New York

Secretary-General’s Reports on the Capital Master Plan:


• Eight Annual Progress Report of the Secretary-General on the Capital Master Plan, A/65/511, 14 October 2010

• Ninth Annual Progress Report of the Secretary-General on the Capital Master Plan, A/66/527, 26 October 2011

• Tenth Annual Progress Report of the Secretary-General on the Capital Master Plan, A/63/350, 5 September 2012

• Eleventh Annual Progress Report of the Secretary-General on the Capital Master Plan, A/68/352, 27 August 2013

• Twelfth Annual Progress Report of the Secretary-General on the Capital Master Plan, A/69/360, 27 August 2014
http://www.un.org/ga/search/view_doc.asp?symbol=A/69/360 (Links to an external site.)

- Thirteen Annual Progress Report of the Secretary-General on the Capital Master Plan, A/70/343, 27 August 201

http://www.un.org/ga/search/view_doc.asp?symbol=A/70/343 (Links to an external site.)