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 favour 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 convinced 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

September 7  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.) (Links to an external site.)

September 14  Early Years of UN Planning
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?

George Dudley -- A Workshop for Peace%2c Desigining the UNHQ -- Pages 1 to 57.pdf
https://www.amazon.com/Workshop-Peace-Designing-Nations-Headquarters/dp/0262041375 (Links to an external site.) (Links to an external site.)

September 21  Renewal 1999 – 2014
Retrofit/preserve or demolish and build anew.

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

Required Reading: Report of the Secretary-General proposing the Capital Master Plan to the General Assembly, A/55/117, 28 June 2000, pages 1-27
3Renewal 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.)
September 28  

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


UN Embodied Carbon Report__26aug2016_vidarıs_rev.pdf/Columbia Final Sylabus Sustainable Retrofits.docx

October 5  

The art collection 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 to state of the art; broadcast and documentation systems; robotic cameras; preservation and window shades vs blinds; data centers; Con Ed electric vaults;

Required Reading: TBD

October 12  

Class Cancelled due to studio work. In lieu of the class, the following reading is required:

“Sustainable Design” by David Bergman. Chapters: Eco design, active techniques, site issues, water efficiency, energy efficiency: passive techniques and energy efficiency: active techniques.

October 19  

Safety and Security

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

Required Reading:TBD

October 26  

Design

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


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.)
November 2    Construction

Managing the CM, phasing the work while still in partial use, noise control, what does restoration look like? Speed without risking safety, details, functionality, turn over to “the house”

Required Reading: TBD

November 9    Preservation

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, aluminium for stainless;

Required Reading: TBD

November 16   National Park Service -- complex partnerships projects

Statue of Liberty, Ellis Island, Gettysburg,

Required Reading: TBD

November 23   Field Trip to the United Nations

November 30   The Renovation of the Palais des Nations (Geneva) Jack Howard

Discussion with the leadership of the Strategic Heritage Plan

Required Reading: TBD

December 7    Final Strategy Presentations

Bibliography

Books and articles:


https://www.amazon.com/United-Nations-70-Restoration-Renewal/dp/0847846156 (Links to an external site.) (Links to an external site.)


ISBN-10: 1859849016

https://www.amazon.com/dp/1859849016/ref=olp_product_details?_encoding=UTF8&me (Links to an external site.)


https://www.amazon.com/United-Nations-Building-Block/dp/B007PMQM58 (Links to an external site.)


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:


http://www.un.org/ga/search/view_doc.asp?symbol=A/59/441 (Links to an external site.) (Links to an external site.)


http://www.un.org/ga/search/view_doc.asp?symbol=A/60/550 (Links to an external site.) (Links to an external site.)


http://www.un.org/ga/search/view_doc.asp?symbol=A/60/874 (Links to an external site.) (Links to an external site.)


http://www.un.org/ga/search/view_doc.asp?symbol=A/61/549 (Links to an external site.) (Links to an external site.)


http://www.un.org/ga/search/view_doc.asp?symbol=A/62/364 (Links to an external site.) (Links to an external site.)


http://www.un.org/ga/search/view_doc.asp?symbol=A/63/477 (Links to an external site.) (Links to an external site.)


http://www.un.org/ga/search/view_doc.asp?symbol=A/64/346 (Links to an external site.) (Links to an external site.)


http://www.un.org/ga/search/view_doc.asp?symbol=A/65/511 (Links to an external site.) (Links to an external site.)

http://www.un.org/ga/search/view_doc.asp?symbol=A/66/527 (Links to an external site.) (Links to an external site.)


http://www.un.org/ga/search/view_doc.asp?symbol=A/68/352 (Links to an external site.) (Links to an external site.)


http://www.un.org/ga/search/view_doc.asp?symbol=A/69/360 (Links to an external site.) (Links to an external site.)


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