Breathing Architectures
Air Remediation Center / Carbon TradeXchange
New Public Atmospheric Infrastructures:

Through the use of digital, simulation and analog technologies this studio will address the issue of air quality in New York City, Beijing and beyond while simultaneously exploring the resurgence of public infrastructure architectures to reduce energy consumption, remediate environmental degradation and harvest and distribute renewable energy.

Design Problem:
The environmental and biological impact of poor air quality has plagued many civilizations throughout history. The industrialized age in particular has recorded unprecedented negative environmental effects in addition to staggering health related conditions. The post industrial through to the post modern era have each continued to further compromise the fragile environmental equilibrium that many scientist have cautioned is necessary for our continued habitation of the planet. The studio will address these issues by designing a Urban Air Remediation Facility in NYC.

Premise:
Digital technologies are undoubtedly an important evolution in defining the usefulness of architecture as a critical professional practice. Design processes in terms of procedure and outcomes have been greatly restructured by digital technologies. One way is in the ever increasing capacity to solicit and input increased amounts of information. This is highly useful in resolution and provision of design solutions, capable of increased environmental responsiveness and or performance. This studio will research environmental performance criteria as a conductor of form whereby distinctions are blurred during the design process between geometry and analysis and in design evaluation, between appearance and performance.

The term intricacy is intended to move away from [the] understanding of the architectural detail as an isolated fetishized instance within an otherwise minimal framework. Detail need not be the reduction or concentration of architectural design into a discrete moment. In an intricate network, there are no details per se. Detail is everywhere, ubiquitously distributed and continuously variegated in collaboration with formal and spatial effects...Intricacy occurs where macro- and micro-scales of components are interwoven and intertwined. - Greg Lynn, “Intricacy”

Additional Information:
The studio will work with several professional design consultants including software, engineering and environmental. Students will work in collaborative teams. A Spring Break trip to NY is encouraged to visit consulting firms offices, and the NYC project site, Robert Moses Park / East River, United Nations Headquarters South.