This is an affiliated course with Georgia Tech’s SERVE-LEARN-SUSTAIN Initiative
Sponsors: The Georgia Conservancy and the Turner Foundation

Open only to students in the School of Architecture and other students who have a prior degree in landscape architecture.

COURSE OVERVIEW

This course is a design workshop, involving seminars, case study presentations, and design projects focused on the role of rainwater as a design resource for architects. Designing for rainwater - stormwater as it is often labeled - responds to the necessity to design sustainable communities in our age of climate change, from the scale of the building to site to street to neighborhood to city and region.

LEARNING OUTCOMES

Understand water as fundamental to sustainable design in the relationships among ecological, economic and social systems at multiple scales and various global situations.

Understand the history and development of urban stormwater management and contemporary efforts to make green and blue infrastructure as the foundation of sustainable communities.

Understand topography, grading and basic technical considerations of architectural site and project design and be able to apply that knowledge to the site of a design project.

Understand the relationships of a specific building site to its drainage basins and watersheds as the foundation of site and project design.

Understand the hydrologic cycle and be able to calculate stormwater flow characteristics for small drainage basins and sites using simplified methods.

Understand the range of green infrastructure best management practices and their technical and construction requirements and be able to apply those tactics to a specific design project and assess potential performance.

Understand the importance of water resources and sustainable rainwater design in the necessary transformation of our professions – architecture, urban design, planning, building construction and engineering.

EVALUATION AND GRADING

Course grading will be based equally on (1) attendance and participation in class, including case study presentations, (2) homework, including reading summaries and homework problems, and (3) the green infrastructure design project.