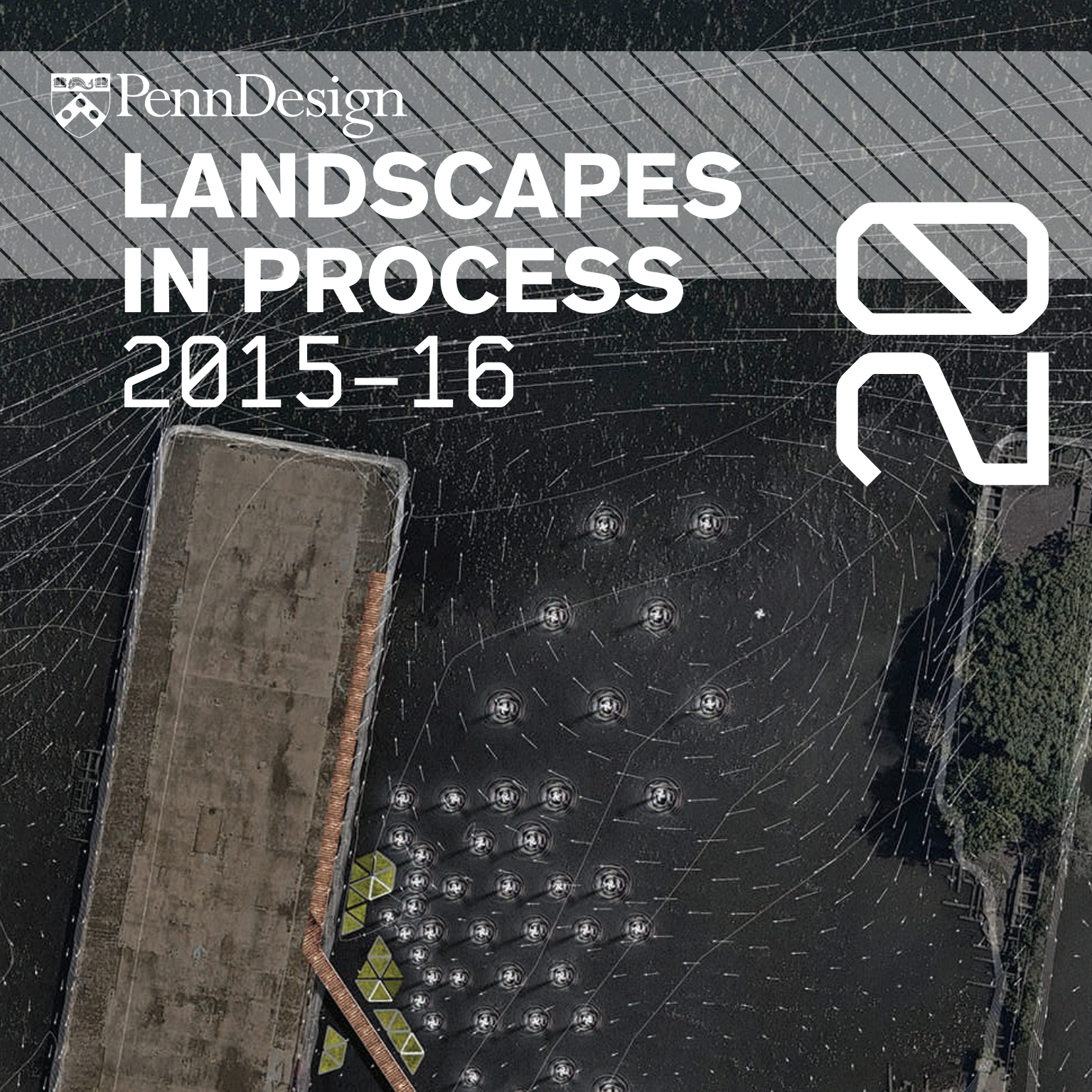
PennDesign

LANDSCAPES IN PROCESS 2015–16



Landscape Documents
present innovative studio and
research projects by the faculty
and students in the Department
of Landscape Architecture,
School of Design,
University of Pennsylvania.

Layout and production by
Richard Weller, Darcy Van Buskirk
and Diane Pringle, and the landscape
architecture students who provided
images of their work.

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Front cover image:
Shengnan Hou, Audrey Lin and
Rui Zhao, site plan

FOREWORD

The work collated in these pages offers a glimpse into the Master of Landscape Architecture program at Penn. This is the twentieth volume in a series of end-of-year reviews, outlining the coursework and events of the past academic year. This year we have included sections with information about the MLA program including the history of the program, philosophy, curriculum requirements, MLA and dual-degree plans of study. During the 2015-2016 academic year the department continued to refine the curriculum modifications approved by the faculty in early 2014. While this publication is an extremely edited and partial form of summary, it communicates not only the richness of the MLA curriculum at Penn but also the department's commitment to advancing the field through inquiry and design-based research.

In addition to coursework in history and theory, media and visualization, ecology, plants, earthworks, water management and construction technology, studio work captures the full ambitions of a program committed to design. Last year, studio sites included several in Philadelphia: East Fairmount Park; Bartram's Garden; a section of the Delaware riverfront in the Bridesburg neighborhood; play spaces in West Philadelphia; and then further to the slate lands in eastern Pennsylvania; greenfields and brownfields of the coastal Northeast Corridor; the Red Hook Port District in Brooklyn; San Antonio, Texas; the new city of Cherafate, Morocco; the Galician Coast of Spain; former rail yards in Merida, Mexico; and the Jing-Jin-Ji Megaregion in Beijing, China.

The geographic reach, variety of scale and complexity of issues with which students and faculty have engaged in these studios is testament to our ambitions for landscape architecture in the twenty-first century. Most importantly, the work that has resulted from these studios extends the program's reputation for conceptual experimentation and formal resolution.

Richard Weller
Professor and chair
October 2016

HISTORY OF LANDSCAPE ARCHITECTURE AT PENN

The School of Fine Arts at the University of Pennsylvania was started in 1890 with programs in architecture and fine arts (including music and art history). Landscape architecture was first introduced as a subject in 1914-15 through a series of lectures by George Bernap, landscape architect for the United States Capitol. In 1924, a new department of landscape architecture was founded, with Robert Wheelwright as director, and authorized to award the BLA. Wheelwright was co-founder and co-editor of Landscape Architecture magazine and a practicing landscape architect. He outlined his definition of the profession in a letter to the *New York Times* in 1924:

> *There is but one profession whose main objective has been to co-ordinate the works of man with preexistent nature and that is landscape architecture. The complexity of the problems which the landscape architect is called upon to solve, involving a knowledge of engineering, architecture, soils, plant materials, ecology, etc., combined with aesthetic appreciation can hardly be expected of a person who is not highly trained and who does not possess a degree of culture.*

This first phase of the department's history was brief. It was suspended for ten years during the 1940s; from 1941-1953 no degrees were awarded in landscape architecture. Though a single course was offered in 1951, it was incorporated into a land and city planning department founded by the new Dean, Holmes Perkins. Perkins also recruited Ian McHarg to rebuild the program in landscape architecture.

In 1957, landscape architecture was set up once again as an independent department offering the BLA (for a few years only) and a one-year MLA for architects. McHarg obtained scholarships to support eight students and advertised the new program in *Architectural Review;* the first class of fourteen students came from around the world (including eight from Scotland!). In 1962, McHarg, in partnership with David Wallace, founded Wallace McHarg (later Wallace McHarg Roberts and Todd), initiating a close connection between the department and professional practice that has persisted to this day. Tenured faculty in the 1960s, with a single exception, were all practicing landscape architects.

The decade from 1965-1975 was one of growth in universities throughout the country, from which Penn's Department of Landscape Architecture and Regional Planning also profited. In 1965, a large grant from the Ford Foundation enabled McHarg to found a new regional planning program and to assemble a faculty in natural sciences (meteorology, geology, soils science, ecology, and computer science). In the early 1970s a grant from the National Institute of Mental Health permitted McHarg to add several anthropologists to the faculty and to integrate social sciences into the curriculum. The integration of research and practice in community service has been a long-standing tradition in the department from the 1970s, when faculty and students produced an environmental plan for the town of Medford, New Jersey, and the landscape architecture master plan for the Penn campus.

While enrollment in landscape architecture remained stable during the 1970s, with only modest increase, enrollment in the regional planning program soared and shaped faculty tenure appointments (all three tenure appointments from the late 70s to early 80s were natural and social scientists). By 1985, however, with changes in governmental policies and reduced funding for environmental programs, the enrollment in regional planning collapsed to two to three students per year. Meanwhile, landscape architects on the faculty, with the exception of Ian McHarg, had reduced their teaching commitment to half-time or less. Yet the department has served as a laboratory and launching pad for new professional practices, nationally prominent firms include: WMRT (now WRT) and Collins DuTot (now Delta Group) in the 1960s, Hanna/Olin, (now OLIN) in the 1970s, Andropogon Associates in the 1970s, and Coe Lee Robinson (now CLRdesign Inc.) in the 1980s.

In 1986, Anne Whiston Spirn was recruited to succeed McHarg as chair with the mandate of extending the department's legacy and renewing its commitment to landscape design and theory. The task of the next eight years was to reshape the full-time faculty in order to teach landscape architects, now the vast majority of students in the department, and to rebuild the regional planning program in collaboration with the Department of City and Regional Planning. In the 1980s and 90s the department's tradition of community service continued with the West Philadelphia Landscape Plan and Greening Project that engaged faculty and students with neighborhood residents in planning and with the design and construction of local landscape improvements.

The 1990s was a period of growing deficits and shrinking financial resources in universities throughout the nation; Penn's Graduate School of Fine Arts was no exception. Despite these constraints the department has continued to respond to the needs of landscape architecture education and practice. Indeed, since the late 1960s a central idea sustaining the curriculum has been process – process in terms of design, ecology and social ideas, especially as these relate to the needs of the profession. The addition of humanist and artistic perspectives to natural and social scientific emphases culminated in a major revision of the curriculum during 1993 and 1994.

In 1994 John Dixon Hunt was appointed professor and chair of the department. He continued the department's strong tradition of chairs as authors and editors and brought an established international reputation as perhaps the world's leading theorist and historian of landscape architecture. Between 1994 and 1999, the faculty developed significant advances in the collaboration between design and conceptual or theoretic inquiry, giving landscape architectural design a fresh visibility at the critical edge of practice. Hunt also launched what has now become an internationally recognized publication series on landscape topics, the University of Pennsylvania Press Penn Studies in Landscape Architecture.

In May 2000, James Corner was named the chair of the department. Corner is a graduate of Penn's MLA program (1986, under Ian McHarg). He was first appointed to the faculty as an assistant professor in 1989, and was promoted to professor in 2000. His commitment to advancing contemporary ideas and innovative design sets the current tone of the department, where renewed emphases upon ecology, technology, digital media, theory and urbanism drive the design studio sequence. Corner also brought a commitment to enhance the international flavor and stature of the department, situating it at the center of contemporary global discourse and practice. His own practice, James Corner Field Operations, based in New York, is widely recognized as one of the leading design firms in the world, with major projects such as the High Line, Fresh Kills Park and Lake Ontario Park. Together with other recognized practices affiliated with the program such as OLIN, WRT Design, Andropogon, Stoss, Mathur/da Cunha, PEG office of landscape + architecture, KBAS and Ryan Associates, this strong presence of professional practice greatly enriches the landscape architecture program. The number of applications nearly doubled during the period 2000 to 2010, and actual enrollments increased by nearly fifty percent.

In July 2003 the Graduate School of Fine Arts changed its name to the School of Design. This change reflected the broader nature of the departments and programs under its domain together with the School's emphasis upon design. Under the previous Dean, Gary Hack, and now the current Dean, Marilyn Jordan Taylor, the School has enjoyed a renewed commitment to cross-disciplinary work, scholarly and professional leadership and international visibility – all of which have directly benefited and enriched the landscape architecture program.

Since 2008, significant changes have taken place with regard to faculty composition. Professor John Dixon Hunt was promoted to professor emeritus in 2009; associate professor Anita Berrizbeitia left to assume a position at Harvard; and various adjunct and lecturer positions changed. These losses led to new gains and new appointments – assistant professors Karen M'Closkey in 2007 (now associate professor), Raffaella Fabiani Giannetto in 2010, and Christopher Marcinkoski in 2010 (now associate professor); and associate professor of practice David Gouverneur in 2010. The department was honored with the "Best Program in Landscape Architecture" award at the Sixth European Biennial of Landscape Architecture held in Barcelona in 2010.

PROGRAM PHILOSOPHY

Richard Weller joined the faculty in January 2013 as professor and department chair. The department celebrated one hundred years of instruction in landscape architecture at Penn in 2014. Richard Weller and Meghan Talarowski, MLA '13, co-authored a book commemorating the history of the program "Transects: 100 Years of Landscape Architecture at the School of Design of the University of Pennsylvania."

In 2013 PennDesign began an affiliation with the digital publication *Scenario Journal* edited by Stephanie Carlisle and Nicholas Pevzner, MLA '09. The journal investigates complex urban landscape and infrastructural issues. Then in 2014 the department launched a new print journal *LA+ Interdisciplinary Journal of Landscape Architecture,* which is published twice a year. The journal explores issues from a variety of disciplinary perspectives. Its mission is to reveal connections and build collaborations between landscape architecture and other disciplines. Tatum Hands, editor-in-chief, and Richard Weller, faculty advisor, work with groups of student editors on each issue. The first issues include *LA+ Wild, LA+ Pleasure, LA+ Tyranny* and *LA+ Simulation.*

We expect to continue to expand and evolve the long traditions of the program at Penn, we believe that our students and faculty will continue to meaningfully contribute to the field in the twenty-first century, helping to advance new ideas and new forms of practice.

Initially established in 1924 and later revitalized under the leadership of Professor Ian McHarg in the 1960s, the Department of Landscape Architecture and Regional Planning is recognized around the world for its pioneering contributions to ecological planning and design. Today, the Department advances this legacy through its commitment to innovative design as informed by ecology, the history of ideas, techniques of construction, new media, and contemporary urbanism. The work of both faculty and students reflects the ambitious character and intense design focus of the Department, and continues to be deeply influential internationally. Rapidly changing social and cultural conditions around the world require that future professionals will be able to respond with new concepts, forms and methods of realizing projects, and it is to the global future that we look.

The diversity of the profession of landscape architecture is well represented at Penn. Students are introduced both to the varied scales of practice (from gardens and small urban parks to larger territories such as city sectors, brownfields, regional watersheds, megaregions and world heritage conservation areas) and to its broad scope (from formal and material issues to techniques of reclamation, management, and communication). These concerns are most developed in the design studios, where students are encouraged to explore and expand their own creativity while learning the necessary conceptual, visual and technical skills to properly develop their work. Seminars and workshops in history and theory, technology (ecology, horticulture, earthwork, construction, and project management), and visual and digital media further complement and are designed to synchronize with the creative work being undertaken in the studios. Advanced, speculative work takes place in the final year of study, where students may choose from a wide array of offerings across the School and/or pursue independently conceived research projects.

The faculty is internationally distinguished and provides expertise in design, urbanism, representation, technology, and history and theory. Faculty specialize in subjects such as advanced digital modeling, global biodiversity, landscape urbanism, urban ecology, form and meaning of design, cultural geography, representation, brownfield regeneration and detail design. In addition, leading practitioners and theorists around the world are regularly invited to lecture, run seminars, or teach advanced studios. Together with very strong links to the other departments in the School and the wider university the Department is exceptionally well served by talented and committed teachers, each a major authority or emerging voice in the field.

The department is represented in the broader public and academic arenas by a prolific array of important books from faculty and two biannual journals devoted to advancing ideas and critical inquiry in landscape architecture: *Scenario* and *LA+*.

Similarly, Penn faculty are renown for the exceptional quality of their built works of landscape architecture, for example; James Corner's High Line and Laurie Olin's Bryant Park both in Manhattan.

The Department offers two primary courses of study leading to a professionally accredited Master of Landscape Architecture (MLA). The first professional degree program is three years in length and is designed for students with an undergraduate degree in a field other than landscape architecture or architecture. The second professional degree is two years in length and is designed for those who already hold an accredited bachelors degree in either landscape architecture or architecture. Students may be admitted with advanced standing into either of these programs depending upon their respective backgrounds. Dual degree programs with architecture (MLA/MARCH), city planning (MLA/MCP), historic preservation (MLA/MSHP) or fine arts (MLA/MFA) are also available. All of the above named degrees may be combined with certificate programs in Historic Preservation, Urban Design, or Real Estate and Development. The Department also offers a Certificate in Landscape Studies, designed for students who may wish to augment or focus their prior work through research into landscape topics.

FACULTY

Standing Faculty

Richard Weller, *Professor and Department Chair, Martin and Margy Meyerson Chair of Urbanism*
Raffaella Fabiani Giannetto, *Assistant Professor*
Christopher Marcinkoski, *Associate Professor*
Anuradha Mathur, *Professor*
Karen M'Closkey, *Associate Professor*
Frederick Steiner, *Dean and Paley Professor (as of July 1, 2016)*
Dana Tomlin, *Professor*
Aaron Wunsch, *Assistant Professor (HSPV)*

Associated Faculty

Dilip da Cunha, *Adjunct Professor*
David Gouverneur, *Associate Professor of Practice*
Valerio Morabito, *Adjunct Professor*
Ellen Neises, *Adjunct Associate Professor*
Cora Olgyay, *Adjunct Associate Professor*
Laurie Olin, *Professor of Practice*
Lucinda Sanders, *Adjunct Professor*

Emeritus Faculty

James Corner
John Dixon Hunt
Dan Rose

Full-Time Lecturers

Lindsay Falck
Nicholas Pevzner
Keith VanDerSys

Part-Time Lecturers (2015-2016)

Kira Appelhans
Javier Arpa
Megan Born
Molly Bourne
Matthijs Bouw
Greg Burrell
Stephanie Carlisle
Candace Damon
Kate Farquhar
Claire Fellman
Joshua Freese
Miriam Garcia
Tatum Hands
Marie Hart
Trevor Lee
Michael Luegering
Michael Miller
Misako Murata
David Ostrich
Rebecca Popowsky
Cynthia Skema
Andrew Schlatter
Alex Stokes
Abdallah Tabet
Maria Villalobos
Sarah Willig
William Young

THREE-YEAR MLA CURRICULUM REQUIREMENTS

For students with a Bachelor of Arts or Bachelor of Science degree, the total course units required for graduation in the three-year first professional degree program are twenty-eight.

Required Courses		Course Units
Studios		
LARP 501	Studio I	2
LARP 502	Studio II	2
LARP 601	Studio III	2
LARP 602	Studio IV	2
LARP 701	Studio V	2
LARP 702	Studio VI	2
Workshops		
LARP 511	Workshop I: Ecology and Built Landscapes	1
LARP 512	Workshop II: Landform and Planting Design	1
LARP 611	Workshop III: Site Engineering and Water Management	1
LARP 612	Workshop IV: Advanced Landscape Construction	1
Theory		
LARP 535	Theory I: The Culture of Nature	1
LARP 540	Theory II: History and Theory of Landscape Architecture	1
Media		
LARP 533	Media I: Drawing and Visualization	1
LARP 542	Media II: Digital Visualization	1
LARP 543	Media III: Flows: Linear / Non-Linear	1
LARP 544	Media IV: Futures: Trends and Trajectories	1
Studio Co-Requisites		
LARP 761	Urban Ecology (co-requisite with LARP 601)	1
LARP 781	Contemporary Urbanism (co-requisite with LARP 602)	1
Electives		
Students must select four elective courses.		4
TOTAL		28

Students with adequate prior experience may substitute Landscape Architecture elective courses for required courses with the permission of the instructor and with approval of the department chair.

Students who waive required courses must earn at least 24 LARP credits plus the 4 elective credits needed to graduate with the first professional MLA degree.

THREE-YEAR MLA PROGRAM OF STUDY

Plan of Study		Course Units
YEAR 1		
Fall		
LARP 501	Studio I	2
LARP 511	Workshop I: Ecology and Built Landscapes	1
LARP 535	Theory I: The Culture of Nature	1
LARP 533	Media I: Drawing and Visualization	1
Spring		
LARP 502	Studio II	2
LARP 512	Workshop II: Landform and Planting Design	1
LARP 540	Theory II: History and Theory of Landscape Architecture	1
LARP 542	Media II: Digital Visualization	1
YEAR 2		
Fall		
LARP 601	Studio III	2
LARP 761	Urban Ecology	1
LARP 611	Workshop III: Site Engineering and Water Management	1
LARP 543	Media III: Flows: Linear / Non-Linear	1
Spring		
LARP 602	Studio IV	2
LARP 781	Contemporary Urbanism	1
LARP 544	Media IV: Futures: Trends and Trajectories	1
Elective		1
YEAR 3		
Fall		
LARP 701	Studio V	2
LARP 612	Workshop IV: Advanced Landscape Construction	1
Elective		1
Spring		
LARP 702	Studio VI	2
Elective		1
Elective		1
TOTAL		28

TWO-YEAR MLA CURRICULUM REQUIREMENTS

For students with a professionally accredited Bachelor of Landscape Architecture or Bachelor of Architecture degree, the total course units for graduation from the two-year second professional degree program are nineteen.

Required Courses		Course Units
Studios		
LARP 601	Studio III	2
LARP 602	Studio IV	2
LARP 701	Studio V	2
LARP 702	Studio VI	2
Workshops *		
LARP 611	Workshop III: Site Engineering and Water Management	1
LARP 612	Workshop IV: Advanced Landscape Construction	1
Theory		
LARP 535	Theory I: The Culture of Nature	1
LARP 540	Theory II: History and Theory of Landscape Architecture	1
Digital Media **		
LARP 543	Media III: Flows: Linear / Non-Linear	1
LARP 544	Media IV: Futures: Trends and Trajectories	1
Studio Co-Requisites		
LARP 761	Urban Ecology (co-requisite with LARP 601)	1
LARP 781	Contemporary Urbanism (co-requisite with LARP 602)	1
Electives		
Students must select three elective courses.		3
TOTAL		19

Students with adequate prior experience may substitute Landscape Architecture elective courses for required courses with the permission of the instructor and with approval of the department chair. Students who waive required courses must earn at least 16 LARP credits plus the 3 elective credits needed to graduate with the second professional MLA degree. Students may register for up to 5 course units per term.

** All two year MLA students entering with bachelor's degrees other than a BLA from an accredited program are required to attend the Natural Systems / Ecology Week of the Summer Institute; to audit LARP 512: Workshop II – Planting Design (the schedule of classes is arranged to allow for these session to be offered during the first half of the fall term); and have the option to attend the Workshop II Spring Field Ecology week of field trips following final reviews in early May. With the chair's consent, students that can show sufficient previous experience with these materials, may apply for a wavier.*

*** Students who find themselves unprepared for Media III must discuss alternative options with the instructor of Media III.*

TWO-YEAR MLA PROGRAM OF STUDY

Plan of Study		Course Units
Year 1		
Fall		
LARP 601	Studio III	2
LARP 761	Urban Ecology (co-requisite with LARP 601)	1
LARP 611	Workshop III: Site Engineering and Water Management	1
LARP 543	Media III: Flows: Linear / Non-Linear	1
LARP 512	Workshop II Planting Design: 6 audit sessions (see spring LARP 512) For 2 yr students entering with degrees other than BLA degrees	Audit
Spring		
LARP 602	Studio IV	2
LARP 781	Contemporary Urbanism (co-requisite with LARP 602)	1
LARP 540	Theory II: History and Theory of Landscape Architecture	1
LARP 544	Media IV: Futures: Trends and Trajectories	1
LARP 512	Workshop II: Spring Field Ecology week fieldtrips (follows spring final reviews) For 2 yr students entering with degrees other than BLA degrees	Optional
Year 2		
Fall		
LARP 701	Studio V	2
LARP 612	Workshop IV: Advanced Landscape Construction	1
LARP 535	Theory I: The Culture of Nature	1
Elective		1
Spring		
LARP 702	Studio VI	2
Elective		1
Elective		1
TOTAL		19

MLA / MASTER OF ARCHITECTURE DUAL-DEGREE CURRICULUM

ARCHITECTURE [19 cu]		JOINT ARCHITECTURE / LANDSCAPE [4 cu]		LANDSCAPE ARCHITECTURE [17 cu]	
Studio				Studio	
501 Studio I	2.0			501 Studio I	2.0
502 Studio II	2.0			502 Studio II	2.0
602 Studio IV	2.0			601 Studio III	2.0
	6.0				6.0
History & Theory		Joint Studio or			
511 History & Theory I	1.0	LARP 701	2.0	**History & Theory**	
512 History & Theory II	1.0			535 Theory I	1.0
611 History & Theory III	1.0	Joint Studio or		540 Theory II	1.0
	3.0	ARCH 704	2.0		2.0
Visual Studies			4.0		
521 Visual Studies I	0.5			**Media**	
522 Visual Studies II	0.5			533 Media I	1.0
621 Visual Studies III	0.5			542 Media II	1.0
	1.5			543 Media III	1.0
Technology				544 Media IV	1.0
531 Construction I	0.5				4.0
532 Construction II	0.5				
533 Environmental Systems I	0.5			**Workshops**	
534 Environmental Systems II	0.5			511 Workshop I	1.0
535 Structures I	0.5			512 Workshop II	1.0
536 Structures II	0.5			611 Workshop III	1.0
631 Technology Case Studies	1.0			612 Workshop IV	1.0
632 Tech Designated Elective	1.0				4.0
638 Special Topics in Tech	0.5				
	5.5			**Required 600-level Studio Co-Requisites**	
Professional Practice				761 Urban Ecology (with 601)	1.0
671 Professional Practice	0.5			OR	
672 Professional Practice	0.5			781 Contemporary Urbanism (with 602)	1.0
772 Professional Practice	1.0				1.0
	2.0				
Electives				**Electives**	
ARCH Elective I	1.0			None	
	1.0				
Sub-total	19.0	Sub-total	4.0	Sub-total	17.0
TOTAL COURSE UNITS REQUIRED	40				

Recommended plan of study: first year ARCH 500-level; second year LARP 500-level; third year fall LARP 600-level, spring ARCH 600-level; fourth year fall LARP 700-level, spring ARCH 700-level. Students should confirm their individualized study plans with both departments. Waived Landscape Architecture course requirements must be replaced with Landscape Architecture elective courses.

MLA / MASTER OF CITY PLANNING DUAL-DEGREE CURRICULUM

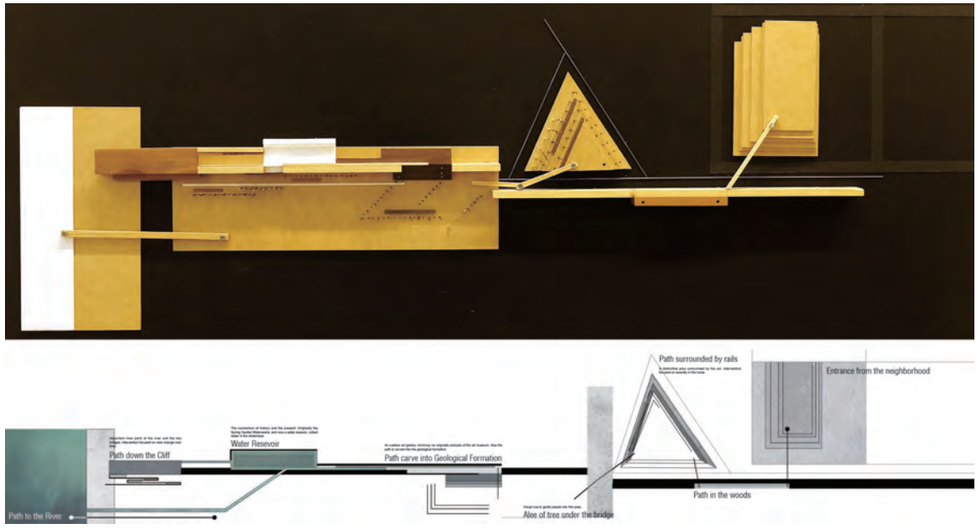
CITY PLANNING [15 cu]		LANDSCAPE ARCHITECTURE [21 cu]	
Core		**Studio**	
500 Introduction to Planning History	1.0	501 Studio I	2.0
501 Quantitative Planning Analysis Methods	1.0	502 Studio II	2.0
502 Urban and Regional Economics	1.0	601 Studio III	2.0
503 Modeling Gegraphic Objects	1.0	602 Studio IV	2.0
506 Negotiation and Conflict Resolution**	1.0	701 Studio V (702 Studio VI)	2.0
509 Land and Urban Development	1.0		10.0
510 Urban Planning Theory	1.0	**History & Theory**	
600 Workshop	2.0	535 Theory I	1.0
7XX Planning Studio	2.0	540 Theory II	1.0
	11.0		2.0
** Students may also meet the cross cutting methods course requirement by taking one of the following: CPLN 504 or CPLN 507.		**Media**	
		533 Media I	1.0
		542 Media II	1.0
		543 Media III	1.0
		544 Media IV	1.0
			4.0
Concentrations			
(Please refer to each specific concentration requirements.)		**Workshops**	
CPLN Concentration	1.0	511 Workshop I	1.0
CPLN Concentration	1.0	512 Workshop II	1.0
CPLN Concentration	1.0	611 Workshop III	1.0
CPLN Concentration	1.0	612 Workshop IV	1.0
	4.0		4.0
15 CPLN course units are required for the MCP degree under the PAB accreditation.		**Required 600-levelStudio Co-Requisites**	
		761 Urban Ecology (with 601)	1.0
		781 Contemporary Urbanism (with 602)	1.0
			2.0
		Electives	
		None	
		Depending on the student's background, a 1 cu course will be waived so there are a total of 21 cus taken in LARP.	
Sub-total	15.0	Sub-total	21.0
TOTAL COURSE UNITS REQUIRED	36		

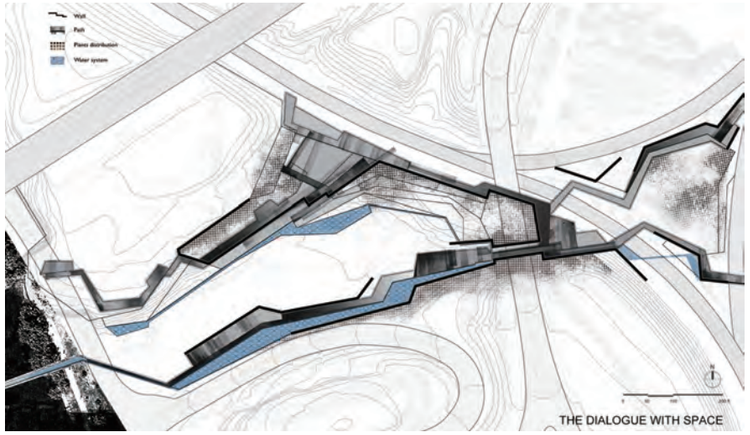
Waived Landscape Architecture course requirements must be replaced with Landscape Architecture elective courses. Dual-degree students should confirm their individualized study plans with both departments.
For more specific information on dual-degree and certificate programs, please consult the departments and the website: www.design.upenn.edu.

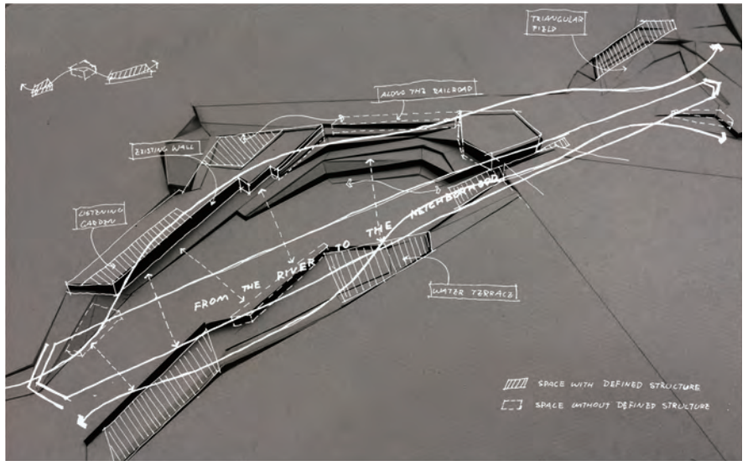
STUDIO I LANDSCAPE PROCESS: IMAGINATION AND CRAFT
BREWERYTOWN GATEWAY, EAST FAIRMOUNT PARK

Critics Valerio Morabito, Rebecca Popowsky and Nicholas Pevzner
Teaching assistants Emily King, Yiqing Wu and Le Xu

This studio explored the design language of landscape. The site for the studio was a wooded stretch of East Fairmount Park wedged between the developing Brewerytown neighborhood and the Schuylkill River. Students were asked to traverse and record the found landscape, and to then re-imagine and project a transformed landscape. Using site-based investigations, mappings, drawings, and models, students experimented with new ways of seeing, experiencing, and transforming the landscape. Out of an in-depth analysis, each student was encouraged to develop their own agenda for the site, drawing out particular qualities that were important. From this, students plotted a new path through this transformed nature – a path that gathered, extended, revealed, and catalyzed new relationships and processes as much as it got one from here to there.







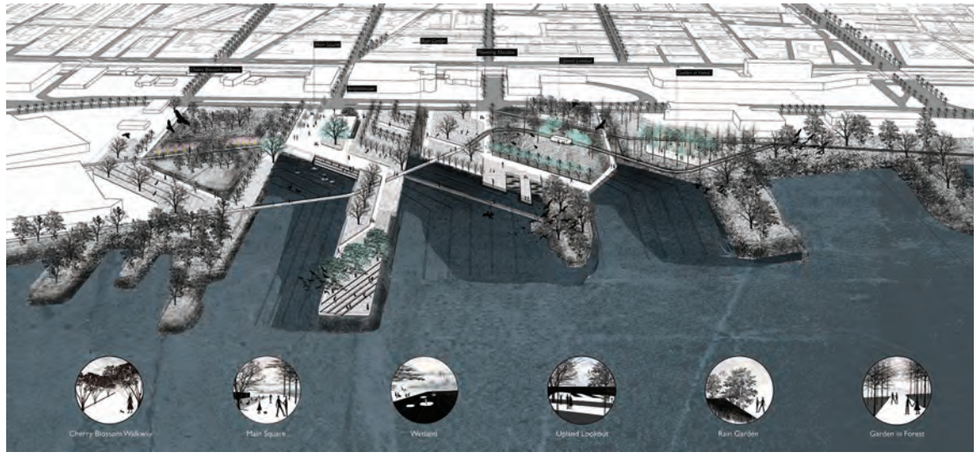
Christian Cueva
Bo Dong
Melissa Flatley
Tiffany Gerdes
Jieru He
Jingyi Hu
Joshua Ketchum
Aaron King
Allison Koll
Prince Langley
Da Hee Lee
Anni Lei
Hong Li
Zhexuan Liao
Matthew Limbach
Na Luo
Stefan Molinaro
Emma Molloy
Hallie Morrison
Prakul Pottapu
Krista Reimer
Michael Rubin
Benjamin Summay
Luke van Tol
Qi Wang
Rivka Weinstock
Ellen Xie
Sarah Yassine
Yang Zhao
Zhoufei Zhu

Jingyi Hu, plan (this page, top), montage (this page, bottom); Yang Zhao, model (opposite page, top), diagram (opposite page, bottom)

STUDIO II GROUNDWORK: PROJECTS FOR THE SOUTH PHILADELPHIA RIVERFRONT PHILADELPHIA, PA

Critics Karen M'Closkey, Misako Murata and Keith VanDerSys
Teaching assistants Jieping Wang, Lok Wai Wong and Zhiqiang Zeng

This studio concentrated on developing skills and creative sensibilities for transforming a section of the Delaware riverfront in the South District of Philadelphia. Through the design of a park, students studied the roles of concept, organization and physical form in the formation of new assemblages of public space and the natural world, and in the creation of new relationships among the site, its immediate edges and the larger region. The theme of "groundwork" provoked thought about the relationship of the existing site and the students' proposed projects. The studio explored this thematic in three ways: as the foundation and framework for change, as "thick surface" in terms of the cultural and material layers of the site, and as topographic manipulation (this latter aspect of the studio was studied directly in the concurrent Media II and Workshop II courses). The goal of the studio was for students to unite imagination, creative speculation, pragmatic analysis and technical competency toward full engagement of the broad range of considerations that come into play when making a landscape project.



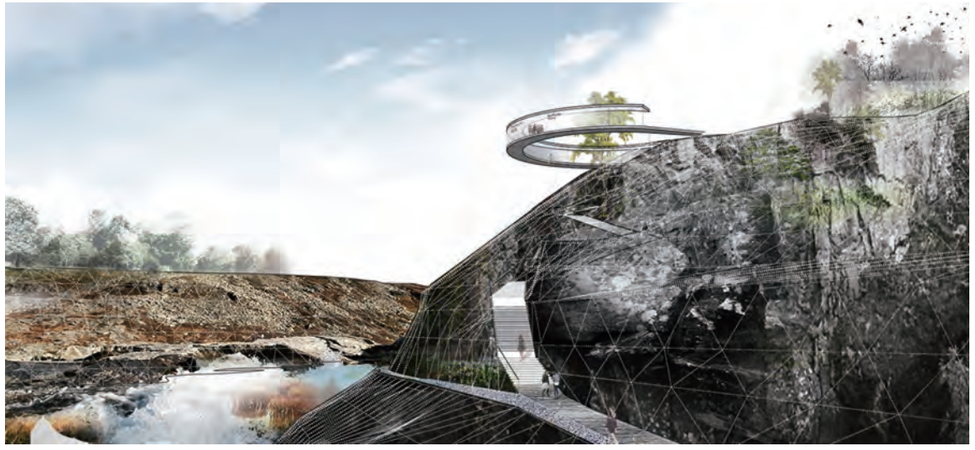
Christian Cueva
Bo Dong
Melissa Flatley
Tiffany Gerdes
Jieru He
Jingyi Hu
Joshua Ketchum
Aaron King
Allison Koll
Prince Langley
Da Hee Lee
Anni Lei
Hong Li
Zhexuan Liao
Matthew Limbach
Na Luo
Stefan Molinaro
Emma Molloy
Hallie Morrison
Lingyu Peng
Prakul Pottapu
Krista Reimer
Michael Rubin
Benjamin Summay
Emily Tyrer
Luke van Tol
Qi Wang
Rivka Weinstock
Sarai Williams
Ellen Xie
Sarah Yassine
Yang Zhao
Zhoufei Zhu

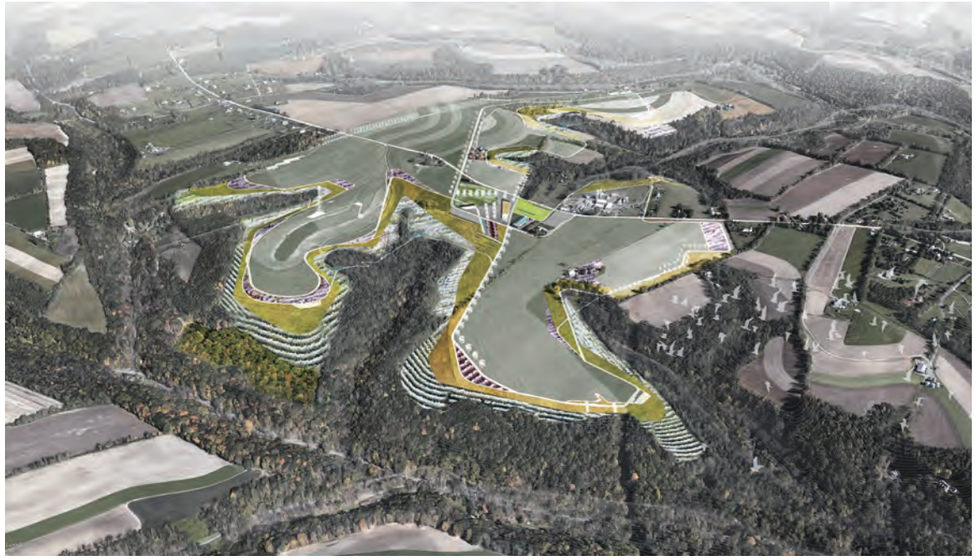
Zhoufei Zhu, renderings and sections (this page); Zhexuan Liao aerial view (opposite page)

STUDIO III GREEN STIMULI: SLATE LANDS

Critics Ellen Neises, Kira Appelhans, Molly Bourne and Todd Montgomery
Teaching assistants Colin Curley, Jierui Wei, Lance Wong and Nathaniel Wooten

The 2015 Green Stimuli studio investigated the problems and potentials of the Slate Belt, a 22-square mile area of the Lehigh Valley along the Appalachian Trail. The studio took on design problems where soil, terrain, geology, mineral resources, climate, water, plants, wildlife, and living systems interactions were major drivers. Studio projects explored one or more of these dimensions in depth to reach high levels of design exploration, strategic thinking, technical resolution and physical expression. The studio's topics intersected with a broad universe of practical concerns, including land use, local and regional economies, real estate development and public policy, as well as philosophical and artistic questions about nature and ecology. The intent was that designed stimuli made new connections between the material of landscape and the economic, infrastructural, scientific, social, cultural and creative attributes of a region. The Green Stimuli studio had two primary objectives: to develop awareness about how best to operate within a given context, and to explore methods for the study and redirection of ecologies and large-scale landscapes. The intention was to unite pragmatic analysis, imagination, creative speculation, and technical skill toward full engagement of the range of considerations that come into play in developing landscape projects with agency.





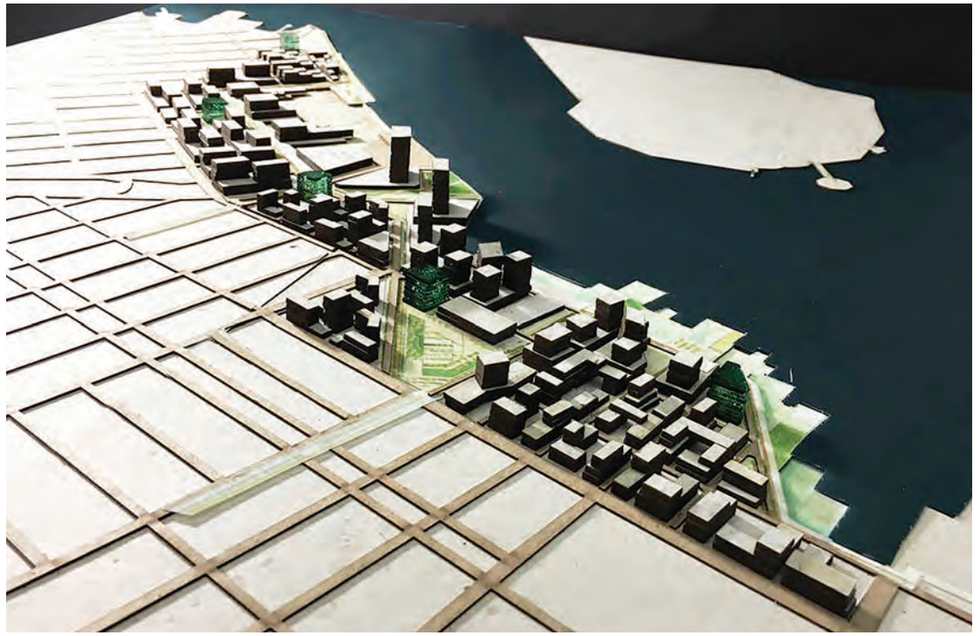
Michael Biros
Jihee Choi
Rong Cong
Jingshi Diao
Nanxi Dong
Sneha Easwaran
Nyasha Felder
Zitong Feng
Scott Jackson
Wenqian Jiang
Jinah Kim
Emily King
Ishaan Kumar
Boyang Li
An Hua Liang
Boya Lu
Shilei Lu
Sean McKay
Lesia Mokrycke
Nicholas Parisi
Karli Scott
Yuzhou Shao
Emily Tyrer
Jieping Wang
Xiaoyang Wang
Hang Yung Elvis Wong
Yiqing Wu
Le Xu
Liqiu Xu
Shuwen Ye
Xinyi Ye
Jingya Yuan
Zhiqiang Zeng
Qinyi Zhai
Tianjiao Zhang
Yuxia Zhou

Zhiqiang Zeng, aerial view (above);
Le Xu, rendering (opposite page)

STUDIO IV URBAN DESIGN AND THE WORKING WATERFRONT: RED HOOK PORT DISTRICT, BROOKLYN, NEW YORK

Critics Nicholas Pevzner, Javier Arpa and Megan Born
Teaching assistants Zhangkan Zhou, Siying Xu and Kathleen Black

This studio focused on a 122 acre site along the Brooklyn waterfront, the Red Hook Container Terminal, which perfectly encapsulates the competing pressures of development, industry and resilience common to urban industrial lands. The site is losing money as a maritime port, and the Port Authority of New York and New Jersey, its owner, is under pressure to sell. Developers are hungry to design new high-end housing at the site, but would face pressure from the City to include affordable housing as part of any plan. Countering the push for development, there is also pressure to retain the site's industrial use for the sake of the jobs it supports. The adjacent Red Hook neighborhood is rapidly gentrifying and feels ambivalent about major changes, but some residents are pushing for better connections along the waterfront and more public open space. At the same time there is a desire to engage the water, there is also a need to protect against it as the threat of storm surges and sea level rise continue to increase. This studio challenged students to test various options for the strategic transformation of the site while taking into consideration these competing agendas. As a core urban design studio, students focused on the design of districts – the articulation of urban form and site organization – rather than on solving problems or particular issues. Early in the semester, the group travelled to New York to conduct a series of workshops with developers, designers, planning officials, and industry representatives in order to give students the conceptual frameworks for tackling this complex and layered site.



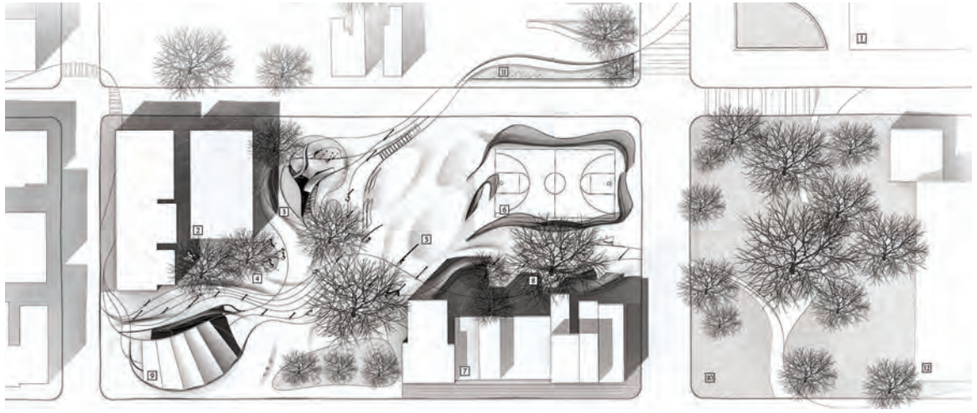
Michael Biros
Jihee Choi
Rong Cong
Jingshi Diao
Nanxi Dong
Sneha Easwaran
Zitong Feng
Scott Jackson
Wenqian Jiang
Jinah Kim
Ishaan Kumar
Boyang Li
An Hua Liang
Boya Lu
Shilei Lu
Sean McKay
Nicholas Parisi
Karli Scott
Yuzhou Shao
Jieping Wang
Xiaoyang Wang
Hang Yung Elvis Wong
Yiqing Wu
Le Xu
Liqiu Xu
Shuwen Ye
Xinyi Ye
Jingya Yuan
Zhiqiang Zeng
Qinyi Zhai
Tianjiao Zhang
Yuxia Zhou

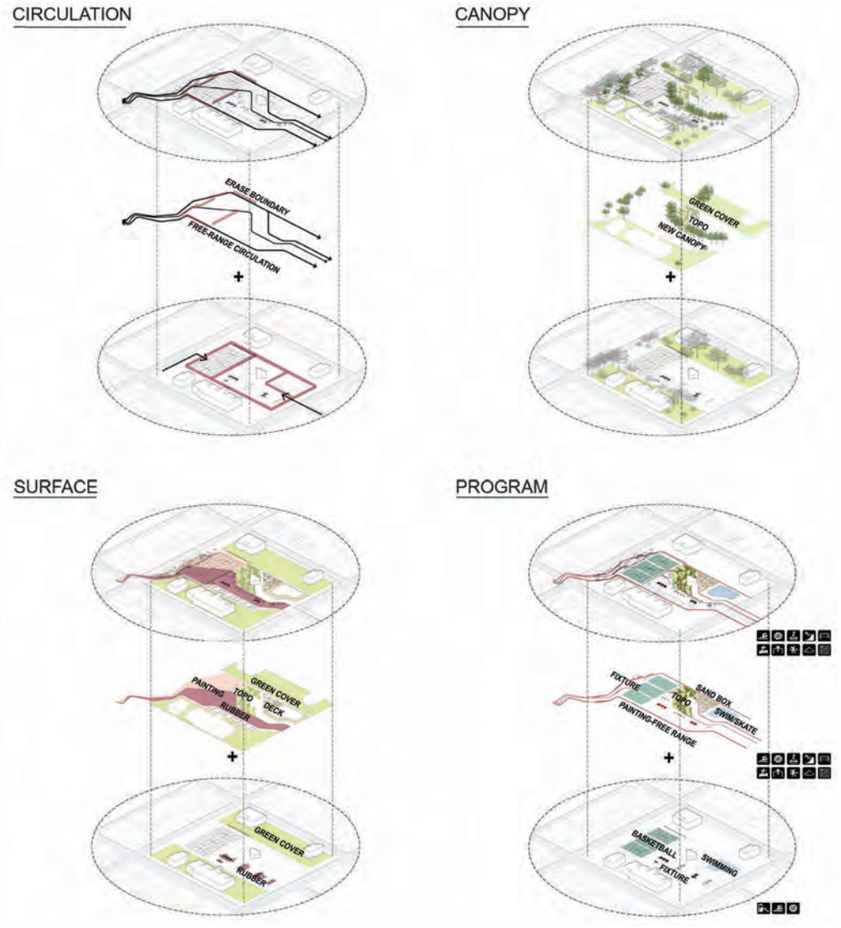
Jihee Choi, Boya Lu and Xinyi Ye, model (above);
Michael Biros and Sean McKay, aerial view (opposite page)

STUDIO V FREE RANGE: PLAY SPACES FOR WEST PHILADELPHIA

Critic Karen M'Closkey

How would our cities look if we designed them first and foremost with play in mind? This studio addressed current public health initiatives through the lens of "play." The relationship of design to public health is at the forefront of conversations regarding walkability, food access, and obesity nation-wide. The first half of the semester was devoted to developing projects for the 2016 Better Philadelphia Challenge Competition, 'Designing Healthy Neighborhoods.' Studio work tapped in to many on-going plans and programs that the Philadelphia Mayor's Office and various organizations, including Penn, Drexel University and the Community Design Collaborative, have instituted as a means to address health through the designed environment. The studio worked alongside these plans and guidelines as a means to create unique places that respond to the specific context of the Mantua and Belmont neighborhoods of West Philadelphia, which together form one President Obama's "Promise Zones" for economic development. While studio projects supported organized modes of play – toys, games, sports, playgrounds – the focus was rather the design of a neighborhood-scale strategy for activating a system of public spaces, supported by a programmatic agenda that was multi-functional, multi-seasonal and multi-generational. Throughout the semester the studio involved public health experts from Penn, including frequent collaborators Amy Hillier of City and Regional Planning and Sara Solomon from the Center for Public Health Initiatives, as well as professionals working to expand the quality of play spaces and schoolyards who joined the studio for lectures, site visits and reviews.





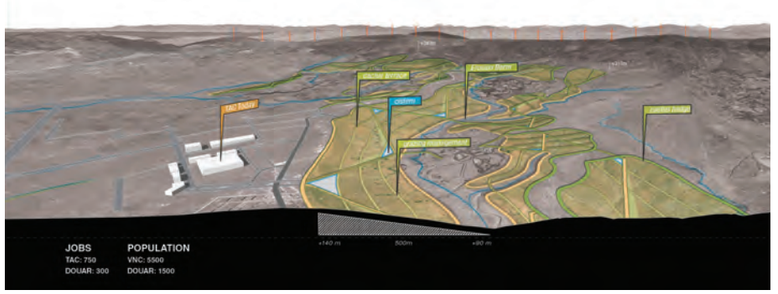
Kathleen Black
Shengnan Hou
Siyang Jing
Haoran Li
Hao Liang
Jierui Wei
Lok Wai Wong
Wen Zhang
Rui Zhao
Zhangkan Zhou

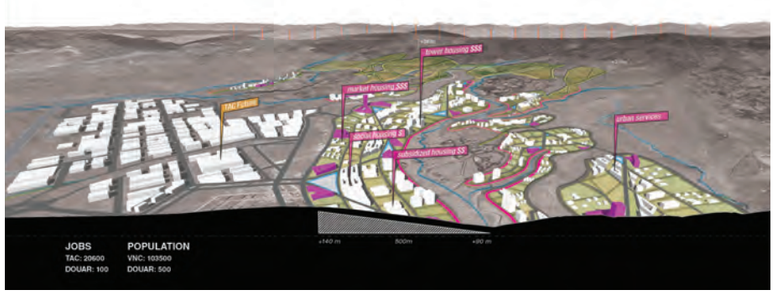
Shengnan Hou, diagram (this page); Rui Zhao, plan (opposite page)

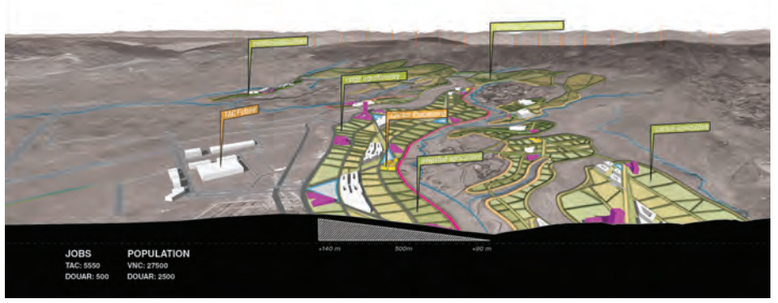
STUDIO V NEGOTIATING GROWTH: AFRICA'S SPECULATIVE URBAN FUTURE: VILLE NOUVELLE CHERAFATE, MOROCCO

Critic Christopher Marcinkoski

This studio was part of an ongoing research initiative exploring the phenomenon of speculative urbanization, with particular attention paid to the role landscape-driven urbanization strategies could have on mitigating the severe consequences – economic, environmental, social and political – that often accompany the "failure" of these pursuits. The studio used Morocco's ongoing new towns program (Ville Nouvelle) as the laboratory for its work. The Ville Nouvelle program – first proposed in late 2004 and actively undertaken in early 2007 – proposes the development of 15 new towns of greater than 150,000 residents to be initiated throughout Morocco by 2020. This studio focused specifically on the "new town" of Ville Nouvelle Cherafate 20km outside of Tangier. Initiated in January 2009 during the depths of the financial crisis, very little of the Cherafate project has been installed. The studio's focus was on the elaboration of bespoke systems of urbanization (land-uses, landscapes, infrastructures, building typologies, etc.) that would allow for the proposed settlement to productively function from environmental, urbanistic, social and economic perspectives regardless of its eventual degree of completion or intensity of occupation, and that could be actively adjusted in real time. While students immersed themselves in the Moroccan milieu, they were also challenged to experiment with methods and strategies that might be abstracted and potentially translated to other contexts.







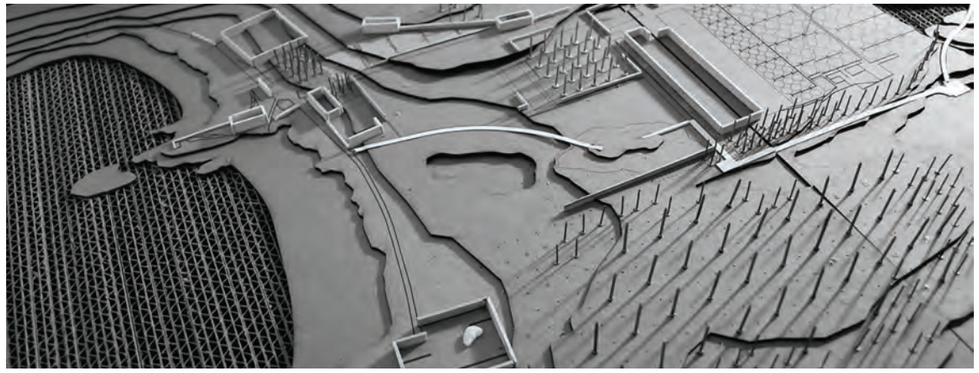
Nuo Bu
Ningxiao Cao
Nicholas McClintock
Nathaniel Wooten
Boqian Xu
Jie Xu
Siying Xu
Xinnan Xu
Zhong Zhao

Nathaniel Wooten, sections (this page); Siying Xu, plan (opposite page)

STUDIO V THE GALICIA STUDIO: DESIGN FOR COASTAL AND CULTURAL RESILIENCE

Critic David Gouverneur
Assistant critic Miriam Garcia

This studio focused on the sustainable management of the Galician Coast, located in the North Atlantic maritime cornice of Spain, a complex ecosystem and a rich cultural landscape affected by concurrent forces both natural and social including flourishing tourism, important fishery and aquaculture industries, and piecemeal urban sprawl gradually occupying rich agricultural land and scenic and fragile areas. These conditions are already being affected by climate change. This studio focused on exploring ways to protect, enhance and diversify social and productive activities of the Galician Coast, addressing environmental aspects and the region's cultural character. While students were asked to be highly sensitive to local conditions, these goals are common throughout the planet where globalization is quickly eroding the uniqueness, and the traditional practices that have made territorial systems sustainable. Facing these challenges may require embracing a "post-natural take" on the human role when shaping and living with nature. In this context, a holistic landscape approach may be the clue for tackling coastal and cultural resilience. In the case of the Galician Coast such an approach necessarily included exploring cutting edge aquaculture practices as part of an integral territorial/site specific strategy, resulting in compelling landscapes. Students had the opportunity to engage with the particular conditions of a broad territorial system while focusing their projects on specific sites. The studio challenged students to explore notions of green infrastructure capable of simultaneously sustaining ecological and economic processes while resulting in places for civic interaction. The combination of process-oriented design and compelling place-making were at the core of this studio.



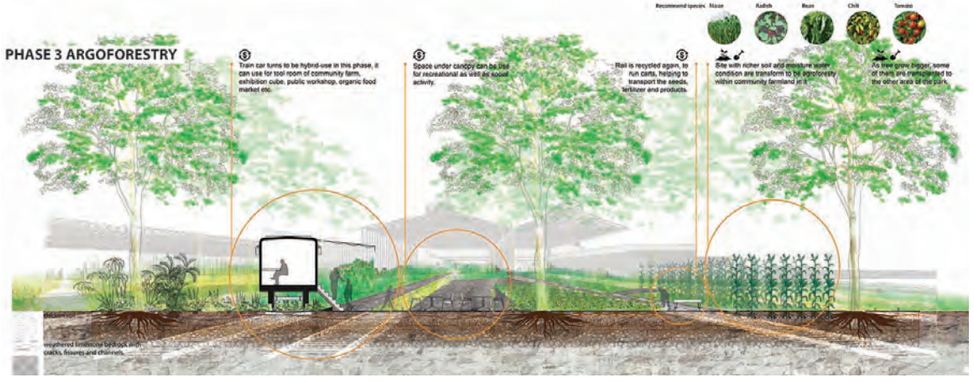
Jungyoon Bae
Adrian Cortinas
Hannah Davis
Yajun Dong
Taran Jensvold
Chiyoung Park
Ziwei Wang
You Wu
Xiaoye Xing
Luyao Zhu

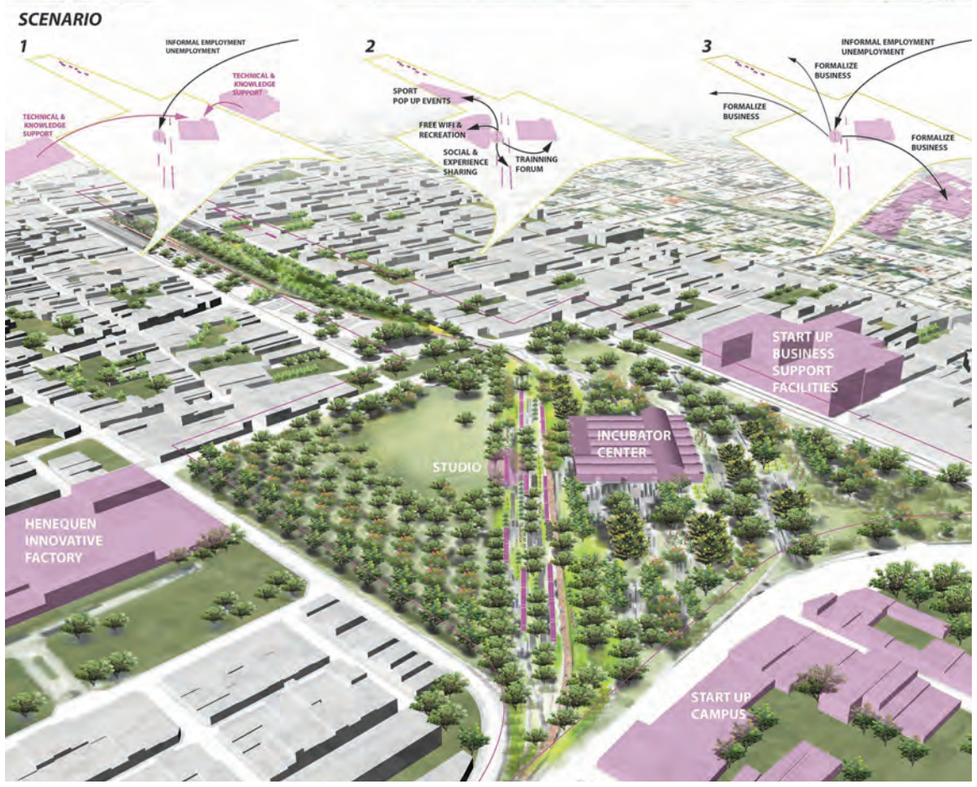
You Wu, aerial views (this page); Chiyoung Park, model (opposite page)

STUDIO V CONVERGING LINES: REDEFINING THE CENTER
MERIDA, MEXICO

Critic Claire Fellman

This studio researched diverse models of public space creation and stewardship, with a particular focus on the issues of contemporary Mexico. Since the North American Free Trade Agreement (NAFTA) was signed in 1994, Mexico has undergone a dramatic transformation in its economy and in the everyday lives of its people. Students examined the impacts of this policy over the past 20 years on patterns of urban growth, and relationships between urban centers and the periphery. Looking to the future, the studio considered what is at stake within this rapidly changing landscape and endeavored to anticipate trends and develop framework strategies that were both flexible and resilient. The studio site was located in Merida, a city of approximately 1 million people located in the Yucatan Peninsula of Mexico, and the now nearly abandoned 58 acre railyard that once served as the heart of the once booming henequen industry. The studio considered new uses for the 120,000 square foot existing warehouse, construction of new buildings on the site, and the potential impacts of networks of transportation to the city at large. Designs were developed to a high level of resolution, with a focus on physical modeling and prototyping. The studio began with studies of small scale objects to develop a formal language that could be carried through design of the park, its circulation networks, planting plans, architectural elements, furnishings, and other aspects of the design. Building off of studies of the site's geology and ecology, the studio examined the potentials of these local materials for construction, and innovated within this spectrum of materials and techniques to develop a site specific design proposal.





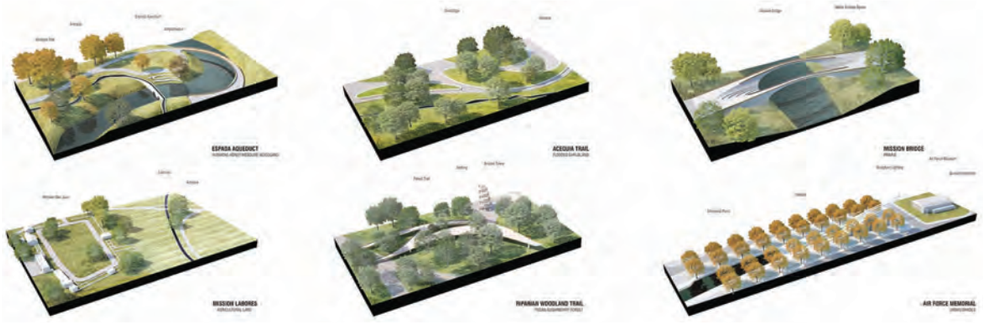
Sheng Cai
Yu-Sheng Dent
Yi Ding
Paula Narvaez
Veronika Ortega
Denisse Paredes
Lanmuzhi Yang
Ya You

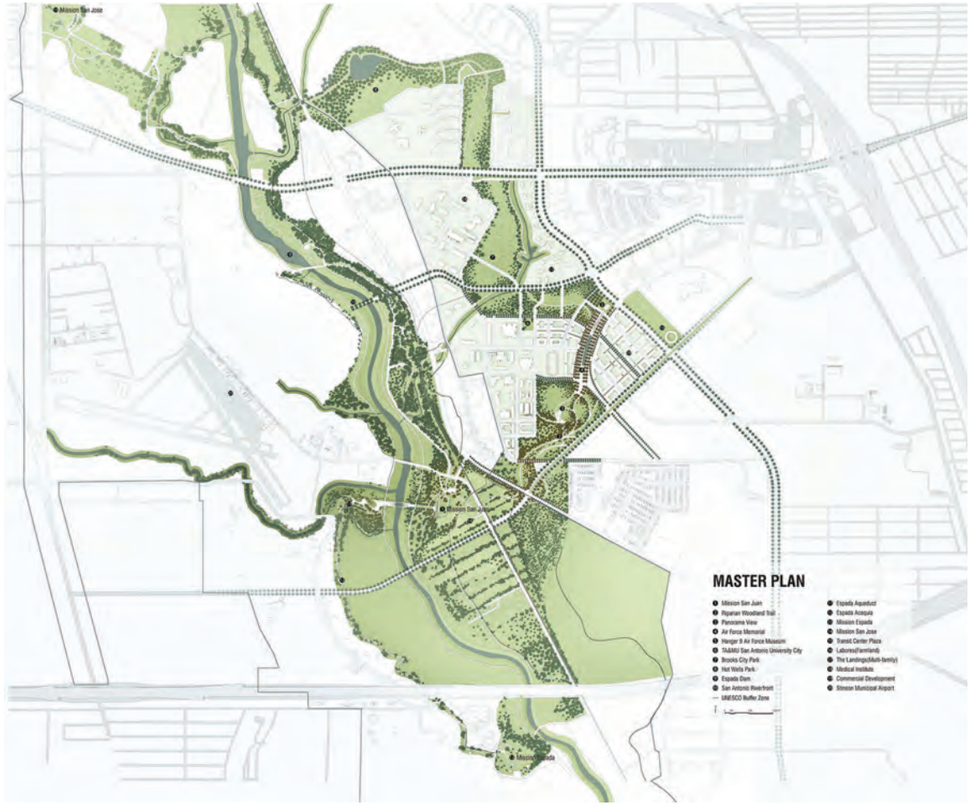
Yu-Sheng Dent and Ya You, aerial diagram (above) and section (opposite page)

STUDIO VI SAN ANTONIO TEXAS: LANDSCAPES OF MYTH, POWER, AND POLITICS

Critic Lucinda Sanders
Assistant critics Trevor Lee and Michael Miller

This studio delved deeply into the influence of politics, power, and myths on the shape of the urban landscape, assuming the position that the values and stories of the people in power are, in essence, imprinted on the land. The studio site was the city of San Antonio, although any city could be framed and deconstructed in the same way. Aside from being a fun city, the mix of tourism and rich heritage made San Antonio particularly fertile ground for the consideration of landscape as a medium for contemporary and historic cultural expression. There are a multitude of stories within the historic and contemporary landscapes, but political polarities have created potential for the number of stories to increase. Voices of multi-culturalism are springing forth, with increasing credence given to those who are interested in revisionist history. The studio asked students to consider a number of questions: Who decides which stories get told where and why? How does the landscape convey narrative and is it an effective medium for narrative? When and where is the landscape reflective of culture or preservation of culture? Can and should landscape negotiate polarities? Are historic or contemporary cultural landscapes consumable? Students endeavored to answer these questions by first familiarizing themselves with the history of the city, identifying the public and civic landscapes, and assessing the effectiveness of the landscape narratives, whether historic, ecological, or contemporary. Then, students worked to develop landscape master plans that linked and further strengthened local identity and culture while balancing tourism. Students made design propositions on sites of their choosing, which included detailed development and programs to enhance the narrative and cultural landscape in San Antonio.





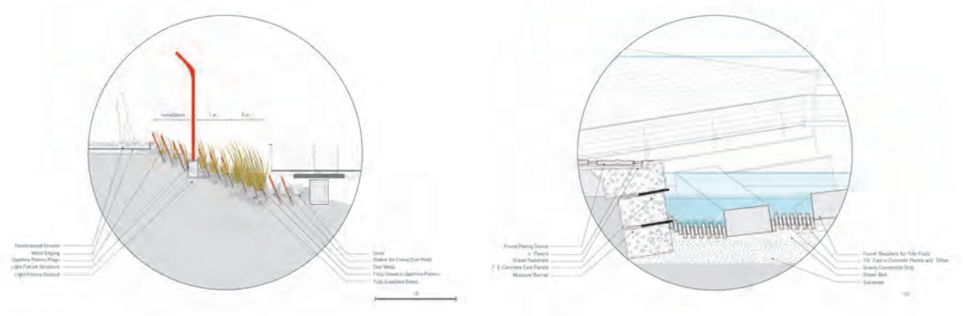
Jungyoon Bae
Adrian Cortinas
Hannah Davis
Yi Ding
Shengnan Hou
Taran Jensvold
Hao Liang
You Wu
Xiaoye Xing
Siying Xu

Siying Xu, plan (above) and axons (opposite page)

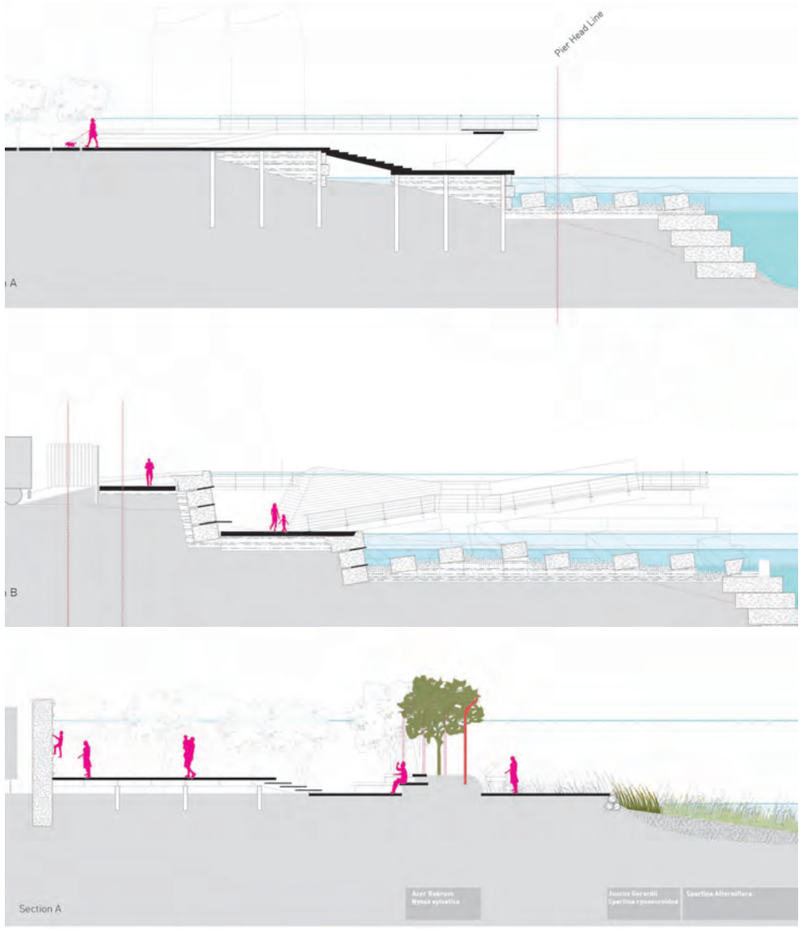
STUDIO VI BRONX BIOLAB

Critic Ellen Neises

The Bronx Biolab studio took on a now standard landscape problem – designed adaptation of urban coastal edges to accommodate rising water, community life and ecology – in new ways. The studio extended the work of the PennDesign / OLIN team in the Rebuild by Design competition and was run as a think tank for Open Source ideas, which were shared with members of numerous local groups, agencies and studio collaborators. The collective aim was for studio design ideas to eventually make their way into components that could be piloted by Bronx community organizations and companies to create jobs, public space and ecology. The Bronx Biolab used design to leverage the impact of multiple small sites, allowing them to operate as a collective – individual intensities within a larger field. The studio considered how a string of small-scale parks could capture the imagination of inhabitants, and serve as a catalyst for broader ecological transformation, and how an ensemble of multi-authored experiments could become a lively agent in the public discussion about adaptation to development and to rising seas in New York City. The small scale of the sites allowed students an opportunity for a very high degree of technical resolution. Students expanded their awareness of materials and construction, biological processes and prompts, gained skills and sensibilities for developing a material imagination and for applying it in problem-solving and design. Consultants Keith Bowers and Chris Streb of Biohabitats brought a breath of ecological expertise to the studio that created an opportunity to move beyond macro-understanding of ecological systems to fine-grained performance-driven ecological design for experience at an intimate human scale.



Nicholas McClintock, section details (this page)
and sections (opposite page)



Yu-Sheng Dent
Emily King
Nicholas McClintock
Ziwei Wang
Nathaniel Wooten
Xinnan Xu
Ya You
Rui Zhao
Zhong Zhao
Luyao Zhu

URBAN DESIGN RESEARCH STUDIO THE QUITO, ECUADOR STUDIO: CONNECTIONS ABOVE 9,000 FEET

Critic David Gouverneur
Assistant critic Maria Villalobos

This urban design cross-disciplinary studio was part of a sequence of applied research studios dealing with urban and environmental issues affecting the growth of cities in developing countries, in this case Ecuador's capital city of Quito. The city is located in the heart of the Andes at an elevation of 9,000 feet. Its urban morphology and character is highly determined by the compelling topographic and hydrological conditions and the tropical climate attenuated by the very high elevation. The metropolitan area, with a population exceeding two million, is experiencing unprecedented urban changes due to a period of sustained economic growth and proactive political leadership both at a national and local level. The public sector has set forward an agenda for urban improvements including a holistic urban vision, the construction of the Quito Metro, important investments in low income/self-constructed communities, and an ambitious program for the improvement and creation of public spaces. The main goal of this studio was to establish a network of connections, operating at different scales, capable of increasing the impact of such initiatives. Particular emphasis was placed on: protecting and enhancing the unique natural and cultural landscape of the city, establishing connections between the formal and informal urban areas and reducing inequalities, addressing urban risks derived from changing climatic conditions, and articulating a robust system of public spaces. Students developed their own understanding of local conditions through initial research and activities carried out during the studio trip to Quito: lectures, site visits, a workshop and a charrette engaging with local actors. This established general criteria as well as an urban framework from which students developed individual proposals, matching their skills and particular areas of interest to compelling site-specific responses. This academic initiative was possible thanks to the support of PennDesign and collaboration of the Municipality of Quito.

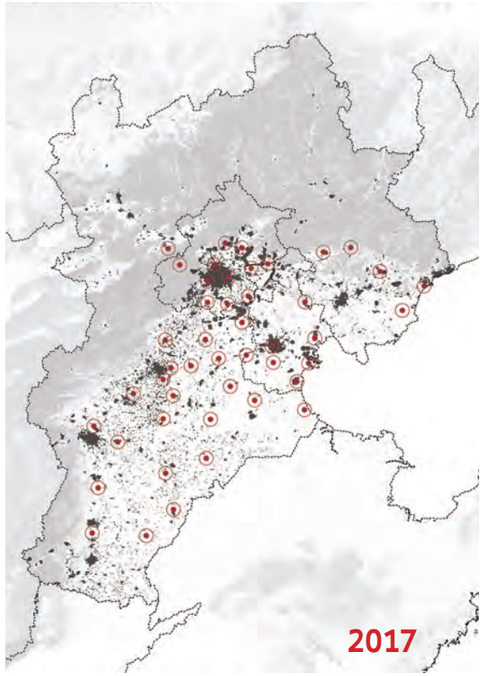
Yun Ai
Kathleen Black
Sheng Cai
Jonathan Hein
Xue Jin
Haoran Li
Mengyun Li
Veronika Ortega
Denisse Paredes
Roza Pattah
Xi Wang
Jierui Wei
Lok Wai Wong
Lanmuzhi Yang
Wen Zhang

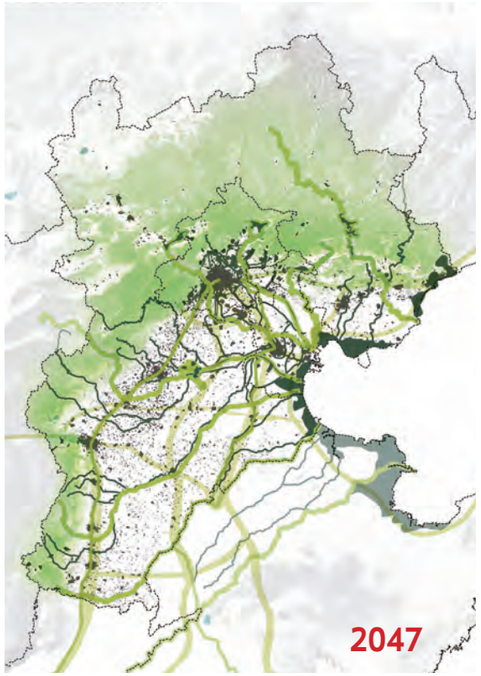
Sheng Cai, plan (this page) and section (opposite page)

CITY PLANNING STUDIO THE PENNDESIGN JING-JIN-JI MEGAREGIONAL STUDIO

Critics Richard Weller, Marilyn Jordan Taylor, Robert Yaro

The Beijing-Tianjin-Hebei region is known as “Jing-Jin-Ji”: Jing representing Beijing, Jin representing Tianjin, and Ji the colloquial name for Hebei province. Jing-Jin-Ji is now one of the world’s largest and most dynamic conurbations. It is also one of the most polluted and congested. The Chinese government has recently declared the Beijing-Tianjin-Hebei region a megaregion. Whereas the world’s megaregions have typically grown organically, the Jing-Jin-Ji megaregion is being planned into existence – it is the world’s first explicit case of megaregionalism by design. This interdisciplinary studio involving students from city planning, architecture and landscape architecture was a key component of the PennDesign China Research program, which comprises four streams in art, planning, landscape architecture and historic preservation. The studio resulted in bold proposals for the ecological and economic restoration and reorganization of the megaregion with a particular focus on Beijing’s livability. The “JJJ Studio” was conducted in collaboration with PennDesign’s research partners at Tsinghua University School of Architecture in Beijing and supported by AECOM.





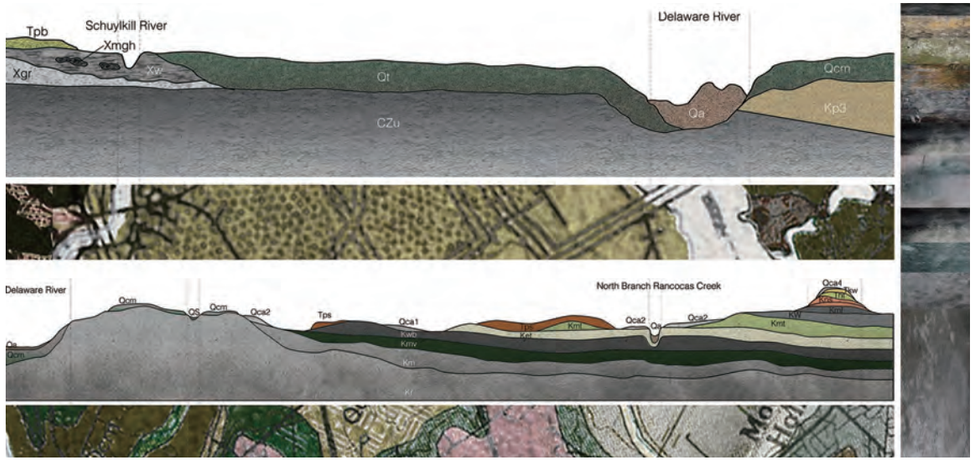
Lucia Artavia
Han Bao
Yajun Dong
Guangda Gao
Alyssa Garcia
Zihan Jiang
Siyang Jing
Taylor Knoche
Gina Lavery
Yani Liang
Evan Liew
Alma Siulagi
Samuel Sklar
Boqian Xu
Peiyong Yu
Zhangkan Zhou

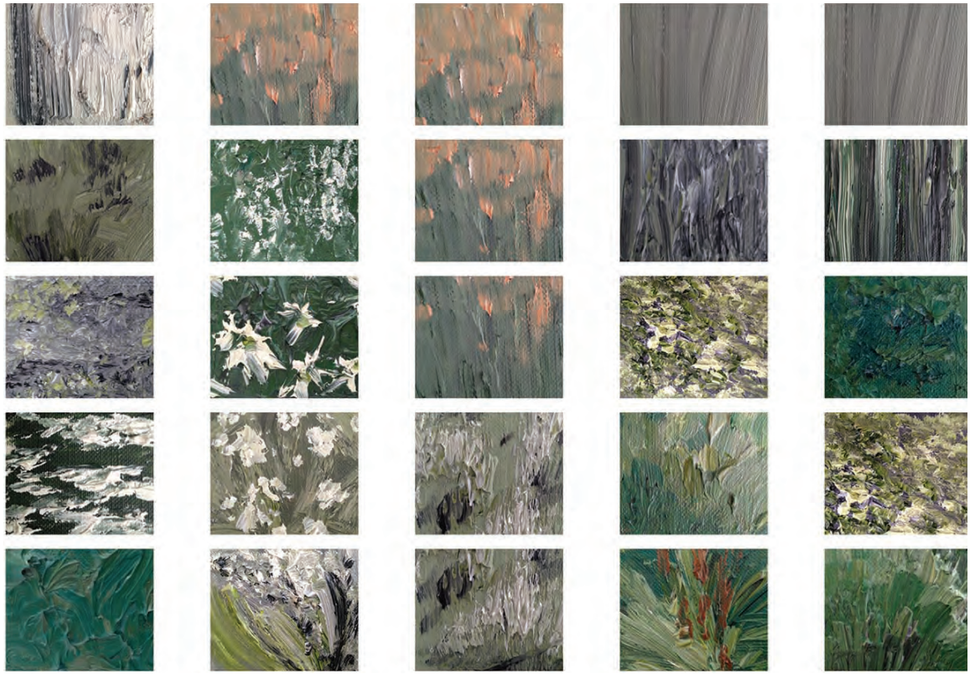
Siyang JIng, maps (this page);
Boqian Xu, rendering (opposite page)

WORKSHOP I ECOLOGY AND BUILT LANDSCAPES

Instructors Sarah Willig, Rebecca Popowsky and Kate Farquhar
Teaching assistants Taran Jensvold and Nicholas Parisi

The purpose of Workshop I was to continue the work of the Summer Institute, during which students explored the Coastal Plain at the John Heinz National Wildlife Refuge, Bristol Marsh, Delhaas Woods and the Piedmont in the Wissahickon Valley and at Valley Forge National Historic Park. During the fall students continued to visit natural areas representative of regional physiographic provinces with sites extending from the barrier islands of New Jersey to the first prominent ridge of the Appalachian Mountains. The goals of Workshop I were to introduce students to the varied physiographic provinces and associated plant communities of the greater Philadelphia region; to characterize and analyze plant communities considering the connections between climate, geology, topography, hydrology, soils, vegetation, wildlife, and disturbance, both natural and anthropogenic; to learn the local flora including plant species identification, an understanding of preferred growing conditions, and potential for use; and to draw and examine the concepts of ecology and design through representation, culminating in a regional cross-section that synthesized field observations.





Fieldtrips included:
Island Beach State Park and Cattus Island County Park (Outer Coastal Plain); Pine Barrens of New Jersey (Outer Coastal Plain); Mount Holly and Rancocas Nature Center, NJ (Inner Coastal Plain); Studio Site in Fairmount Park, Philadelphia (Piedmont); Willisbrook Preserve, Pennsylvania (Piedmont Uplands); Ringing Rocks County Park, Pennsylvania (Piedmont Newark-Gettysburg Lowland Section) and Mariton Sanctuary (New England Province); Hawk Mountain Wildlife Sanctuary, Pennsylvania (Appalachian Mountain Section of Ridge and Valley Province).

Krista Reimer, paintings (above);
Yang Zhao, Na Luo, Zhexuan Liao,
sections (opposite page)

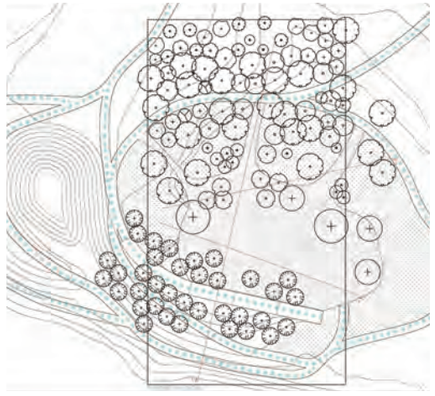
WORKSHOP II LANDFORM AND PLANTING DESIGN

Instructor Cora Olgyay
Teaching assistants Taran Jensvold and Yiqing Wu

Workshop II examined two of the primary tools in the practice of landscape architecture: grading and planting design. The course incorporated a combination of lectures, guest speakers, discussions, field trips, and student presentations. Students had the opportunity to apply the principals of grading and planting to their concurrent Studio II projects.

LANDFORM AND GRADING:
The reading and shaping of landform is an elemental tool in the practice of landscape architecture. This portion of the course aimed to provide an appreciation of landform as an evocative component in the design vocabulary as well as a critical tool in solving difficult design problems. Over the course of Workshop II, the basic techniques and strategies of grading design were introduced and reinforced so that grading design became an integral part of the students' design approach. Landform and grading topics included: reading the surface of the earth (contours and signature landforms), grading basics (calculation of slope, interpolation, slope analysis), leveling terrain (creating terraces on slopes), the flow and management of water, circulation, grade change devices (stairs, ramps, and retaining walls), grading the road, and the process of grading design.

PLANTS AND DESIGN:
This component of Workshop II provided a working overview of the principles and processes of planting design. Plants were considered both as individual elements and as part of larger dynamic systems. Key ecological concepts from Workshop II – the natural distribution of plants, plant community, successional patterns, the relationship of planting and topography – were used as the initial framework. Planting design typologies were examined as an outgrowth of these "natural" patterns. The role of plants as a key element in the structural design of the landscape was explored through a combination of modeling, plan and section drawing, temporal studies, writing, and case studies. Emphasis was placed on process and evolution of planting design, the temporality of planting (daily, seasonal and annual changes), and the establishment and maintenance of plantings.



WORKSHOP II SPRING FIELD ECOLOGY: POSITIVE ENVIRONMENTAL CHANGE

Instructor Sarah Willig
Teaching assistant Nicholas Parisi

The purpose of this five-day field course was to build on Summer Institute and Workshop I, which focused on natural and human factors shaping a variety of landscapes. This week focused on management of landscapes to effect positive environmental change. The aims of Spring Field Ecology were to foster a greater understanding of the varied physiographic provinces of the region including the Coastal Plain, Piedmont, and Ridge and Valley; increase awareness of the fundamental importance of soil in natural and degraded areas; create an expanded view of the local flora, native and non-native, with many plants in flower; provide additional insight into the diversity of approaches and techniques using plants to promote positive environmental change; and to offer some ideas and inspiration from the dedicated, thoughtful individuals met along the way.

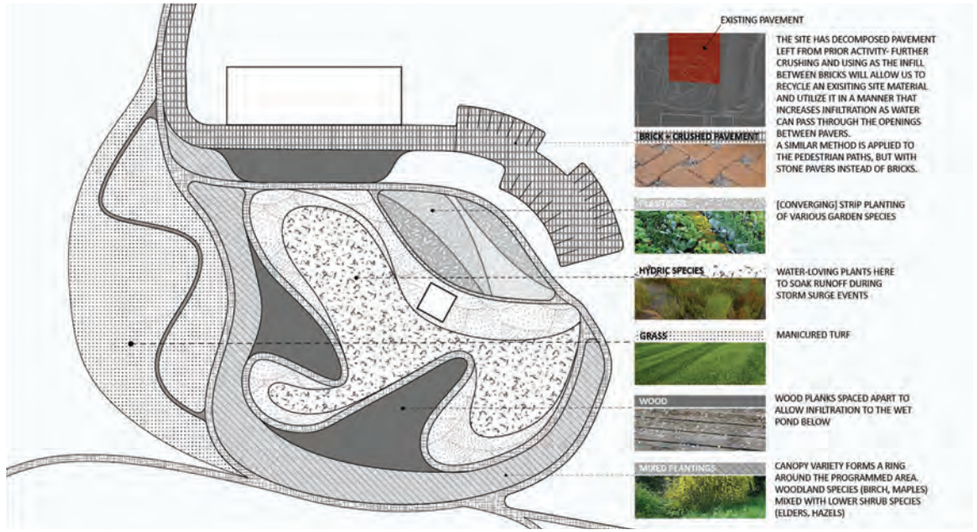
Fieldtrips included:
Burcham Farm, Moores Beach, PSEG Maurice River Township Site, and Living Shoreline at Heislerville on Maurice River, NJ (Outer Coastal Plain);
Stroud Water Research Center and Longwood Gardens "Meadow Garden" (Piedmont Uplands);
Palmerton Zinc Smelter Land Reclamation, Pennsylvania and the Slate Belt Heritage Trail (Ridge and Valley);
Rushton Woods Preserve and Sally Willig's home (Piedmont);
Village of Arts and Humanities, Greensgrow, and Penn Treaty Park in Philadelphia.

Sally Willig, field trip photo (above);
Joshua Ketchum, Aaron King, Rivka Weinstock, planting plan (opposite pate)

WORKSHOP III SITE ENGINEERING AND WATER MANAGEMENT

Instructor Andrew Schlatter
Teaching assistants Paula Narvaez and Zhangkan Zhao

Building upon the skills and concepts developed in Workshops I and II, this workshop focused on the technical aspects of site design, with an emphasis on site grading, site engineering and landscape performance. Functional considerations related to landscapes and their associated systems – including circulation, drainage and stormwater management, site stabilization and remediation – were explored as vital and integral components of landscape design, from concept to execution. Lectures, case studies, field trips, and focused design exercises enabled students to develop facility in the tools, processes and metrics by which landscape systems are designed, evaluated, built and maintained. In concert with the concurrent design studio, students considered the means by which functional parameters could give rise to the conceptual, formal, and material characteristics of designed landscapes.

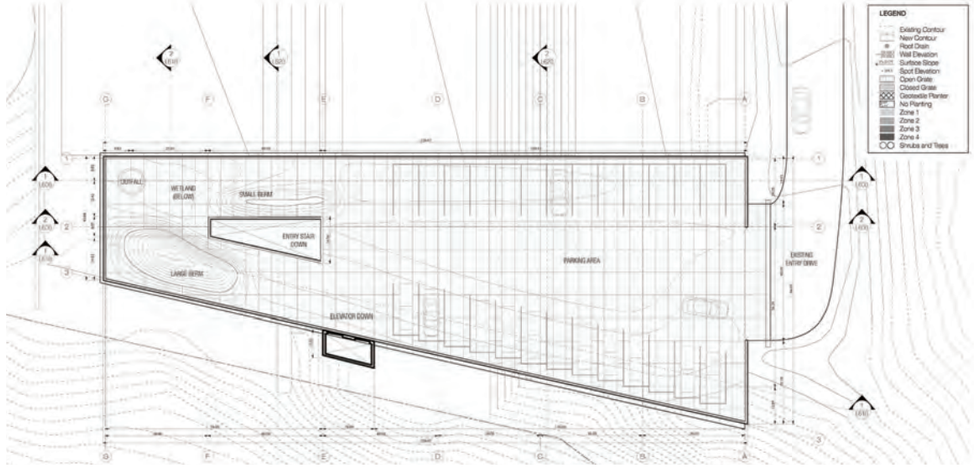


Emily King, plan (this page); Nathaniel Wooten, construction document (opposite page)

WORKSHOP IV ADVANCED LANDSCAPE CONSTRUCTION

Instructor Greg Burrell
Teaching assistant Ya You

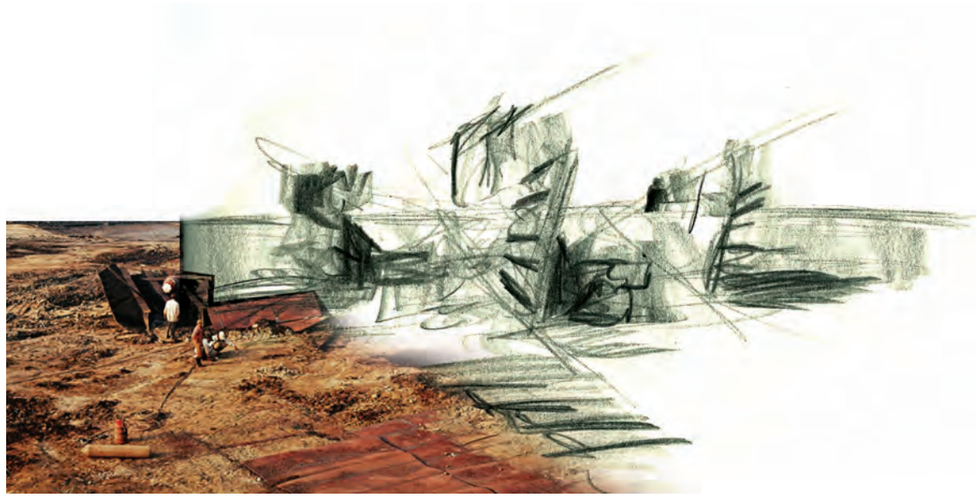
Building upon the skills and concepts developed in Workshops III, this workshop focused on construction documentation, materiality, and the process of communicating a design concept through the life of a project. To highlight the importance of construction documents, the first half of the semester explored three major factors that influence the development and documentation of a project. First, students studied the complexities of the client, designer, and contractor relationships that must be fostered to achieve a successful project. Secondly, students reviewed contractual relationships, how projects get started, the phases of a typical job, and the various ways a project team can be structured. Finally, students reviewed a broad range of material systems, their physical characteristics, modes of production, assembly sequences, maintenance needs, and ultimate recyclability where appropriate. With a clear understanding of project relationships, material systems and process, students then developed a set of construction documents during the second half of the semester. As a basis for this work, students built upon the site designs developed in Workshop III. The course included lectures, discussions, site walks, and two multi-stage assignments designed to build familiarity and proficiency in the documentation process.



MEDIA I DRAWING AND VISUALIZATION

Instructors Valerio Morabito, Rebecca Popowsky and Nicholas Pevzner
Teaching assistants Siyang Jing and Chaowei Chiang

This first course in the Media sequence explored visual representation as a mode to communicate as well as to generate and deepen design ideas. The course strove to balance craft and precision with exploration, experimentation and invention through the creation of hand drawings, digital visualizations, physical models and mixed media compositions. The course gave students a foundation in measured design drawings including plan, section and constructed perspective, and challenged students to critique and reinterpret conventional drawing and modeling techniques. Lectures covered such topics as the use of the hand in the thinking process, how to connect hand movement with computer flexibility, the importance of imagination in the landscape process and precedents in design methodology. While Media I was distinct from Studio I, the two courses were coordinated to maximize thematic and technical synergies.

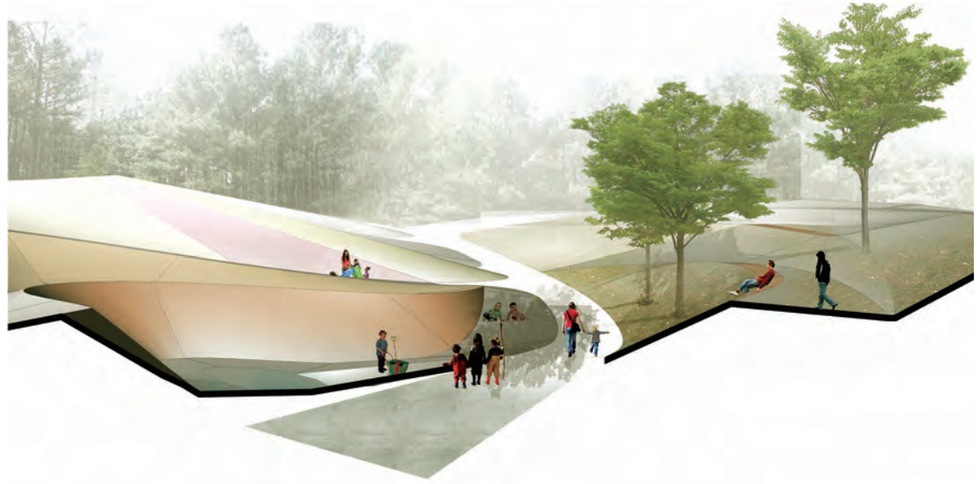


Joshua Ketchum, montage (this page); Qi Wang, rendering (opposite page)

MEDIA II DIGITAL VISUALIZATION

Instructor Keith VanDerSys
Teaching assistants Le Xu and Nicholas Parisi

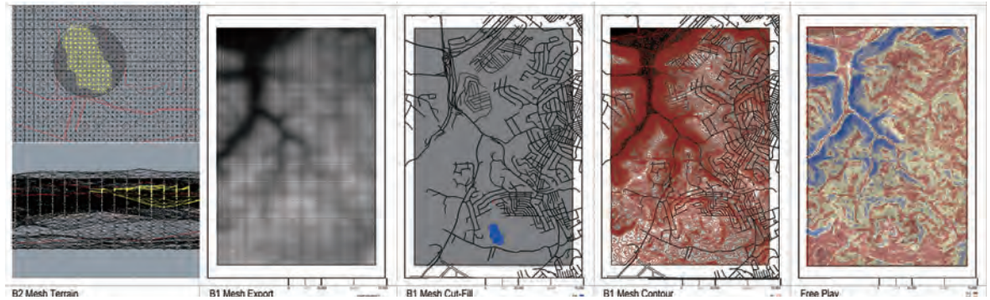
This second course in the Media sequence provided an intensive hands-on inquiry into the exploration, enhancement, and extrapolation of digital media and the subsequent modes of conceptual, organizational, and formal expression. Through a series of working labs, students were introduced to various software applications and numerically driven techniques as a means to learn rigorous surface construction and control through form processing. Instead of understanding computer modeling simply as an end, this course considered digital media as a compulsory tool in design processes. The course provided students with the necessary digital modeling techniques to explore and examine precision surface profiles and land-forming strategies. These models provided a basis to speculate on what processes and programs might be engendered or instigated. Through an emphasis on generative analysis, Media II addressed the increasing recognition that temporal and relational techniques are explicit components of analysis and formation. This course addressed appropriate strategies for managing and converting data and methods for streamlining workflow through various computer applications. Rhino was the primary modeling platform, but associated plug-ins of Grasshopper, Rhino Terrain, Sonic and Bongo extended the toolset; GIS facilitated the collection of extant data. Adobe CC Creative Cloud was also used for documenting and expressing modeling processes through static and time-based visualizations.



MEDIA III FLOWS: LINEAR / NON-LINEAR

Instructors Keith VanDerSys and Michael Luegering
Teaching assistants Xiaoye Xing and Rui Zhao

Media III continued the curricular emphasis on visual communication and design; the course's theme was dynamics and flows. In Media II, students embraced iteration as a process of computational praxis and as an attribute of landscape systems. This course delved deeper into the collection and control of information – from the scale of GIS to sited metrics and embedded sensors – and focused on modeling, parsing, and simulating landscape systems/media as topological, recursive, and spatio-temporal patterns. Students worked with rich fields of landscape attributes (i.e. data) and created parametric tools to draw out significant thresholds and distinguish areal effects. By using parametric attributes, terrain, surface, and site were treated as integrated with the larger geophysical, ecological, and environmental exchanges of landscape. Labs incorporated GIS, Rhino/Rhino Terrain, Grasshopper and AfterEffects. Each software package was approached in terms of creating recursive interactions of attributes within a single program/range of scales and in handling attribute data such that it could be accessed, re-integrated, and represented across software/scales. The overlap of parametric tools enabled the testing of site-scale grading, surfacing, and planting alterations in terms of both local and regional effects, drawing out the non-linear potentials and new patterns catalyzed by site manipulations. In addition, animation software and cinematic collation were explored for their ability to both notate and incorporate diagrammatic duration.

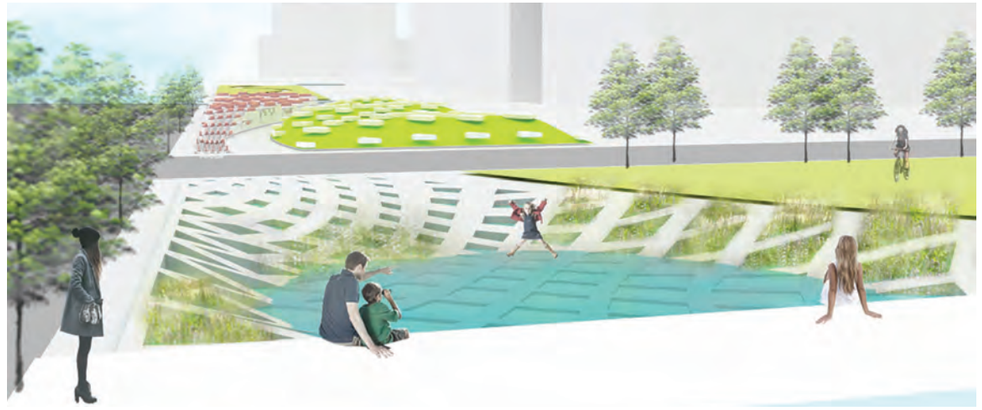


Le Xu, analytical surface systems (above);
Jihee Choi, rendering (opposite page)

MEDIA IV FUTURES: TRENDS AND TRAJECTORIES

Instructor Joshua Freese
Teaching assistants Xiaoye Xing, Ya You and Rui Zhao

The theme of Media IV, the final course in the Media sequence, was trends and trajectories. This course continued the use of the computational methods for analysis, representation and generation of contextual, environmental and geometric conditions that were established in Media II and III. Media IV broadened the use and refinement of these tools to understand the complex range of conditions and dimensions that exist at the interface of the natural and built environment of an urban context. The use of the particular tools and methods in this course were developed to broaden students' ability to evaluate as well as design through relational and conditional modeling. Parametric modeling allowed students to develop their own criteria, and establish parameters founded in environmental information to make translations that qualified and/or quantified these parameters as speculative trends and trajectories within the framework of landscape architecture. Constructing models and tools allowed students to refine their criteria for design evaluation. Material produced was a balanced composition of graphics and information, requiring a specific language and means to express spatial, temporal and cumulative qualities. The course focused on Rhino, with the Grasshopper plug-in, as the primary modeling platfrom. OpenMaps and GIS facilitated the collection of extent data and regional re-integration of site alterations, and the Adobe CC Creative Cloud was utilized in documenting and expressing modeling processes through static and time-based visualizations.



THEORY I THE CULTURE OF NATURE

Instructor Richard Weller
Teaching assistants William Fleming and Chiyoung Park

Drawing on wide-ranging aspects of science, philosophy and the arts, this course surveyed the historical relationship between the subjects of Culture and Nature. The course questioned the stability and historical construction of these binary referents by presenting an overview of the ways in which “nature” has been understood mythically, theologically, ideologically, philosophically, scientifically, artistically, ecologically and politically. The course connected this broad history of ideas to contemporary conditions of ecological crisis and in turn folded this into the history of landscape architecture and urban design. The lectures, readings and associated discussions and exercises were designed to encourage and assist students to develop an understanding of history as a prerequisite for understanding contemporary conditions of ecological crisis. The overriding purpose of this course was to encourage and assist students in developing a personal worldview as the epistemological basis upon which intellectually adventurous, professional careers in landscape architecture can be built.

Topics included:
Words: Nomads, Wild, Nature/Culture; Paradise: Agriculture, Cities, Writing, Meaning, Gardens; Utopia: The Polis, Forms, Dystopia, Ecotopia; Geometry: Cosmology, Maps, Grids, Space and Time; Machines: Scientific and Industrial Revolution, Modernity; Arcadia: Romanticism, Evolution. Ecology; Matter: Atoms, Cells, Light, Indeterminacy, Art; Earth: Postmodernity, Environmentalism, Feminism, Gaia; Stewardship: Conservation, Landscape Architecture; Cyborg: The Anthropocene, Planetary Urbanism, Post-human, Bio-art, Nature Inc., Futurama

Nathaniel Wooten, terrarium (this page);
Wenqian Jiang and Ishaan Kumar, section (opposite page)

THEORY II HISTORY AND THEORY OF LANDSCAPE ARCHITECTURE

Instructor Raffaella Fabiani Giannetto
Teaching assistant Colin Curley

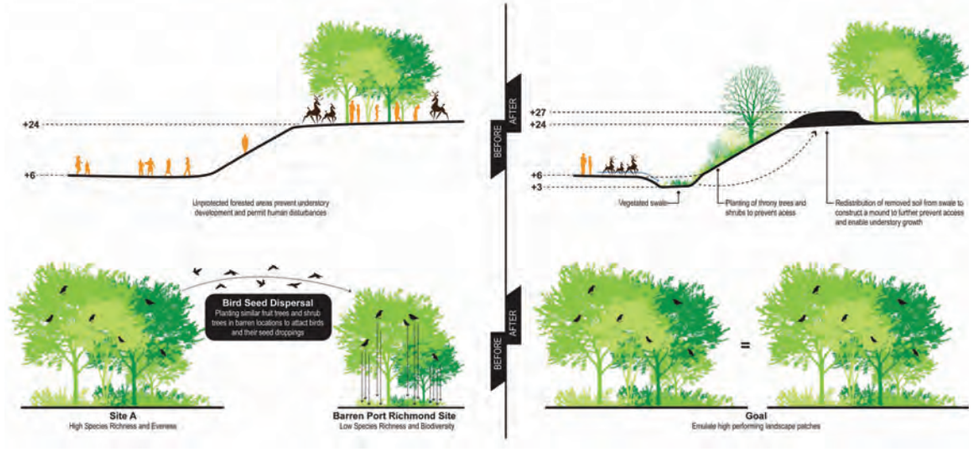
This course unfolded several contemporary issues that shape the profession, such as giving form to environmental values, balancing science and art, ecology and design, reconsidering the need for the beautiful vis-à-vis the many sites challenged by pollution and abuse. Among the topics of discussion, this course also took into account recent phenomena such as the late twentieth-century increase in world population, sprawl, and environmental pollution, and how these have changed the reality described by the very word "nature" and have contributed to expand the domain of landscape architecture. The discussion of contemporary topics centered on the analysis of case studies with lectures providing a context for the latter and addressing the roots of contemporary ideas in earlier theoretical formulations. Within this structure the past was presented as a way to illuminate, receive, and critique the present.

Topics included: Landscape as representation and the representation of landscape; Landscape as process; Ecological design; Landscape urbanism; The sublime; Gardens as art; Balance without symmetry: Modernism; Ordering principles; Landscape as experience; From nature to culture; Landscape history and the practice and theory of landscape architecture

URBAN ECOLOGY

Instructors Stephanie Carlisle and Nicholas Pevzner
Teaching assistant Kathleen Black

This course introduced students to the core concepts, processes and vocabulary of contemporary urban ecology. It aimed to provide a conceptual framework and grounding in an understanding of ecological processes, in order to empower students to develop and critique the function and performance of landscape interventions. Urban ecology described the interaction of the built and natural environment, looking at both ecology in the city, as well as ecology of the city. Lectures, case studies, critical reading and design exercises enabled students to increase their ability to analyze and interpret ecological systems and processes. By analyzing the application of ecological concepts in the design and management of urban landscapes, urban ecology was explored as a dynamic, human-influenced system. Throughout the semester, invited speakers visited the class through a series of applied ecology panels on focused topics. Students worked to further apply and explore ecological concepts through a semester-long group project with a discrete site. The course addressed urban ecological issues and was designed to complement and support the work being undertaken by the students in the LARP 601 Studio III: Green Stimuli: Slate Lands studio.

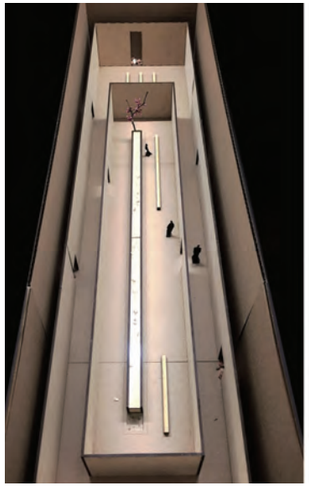


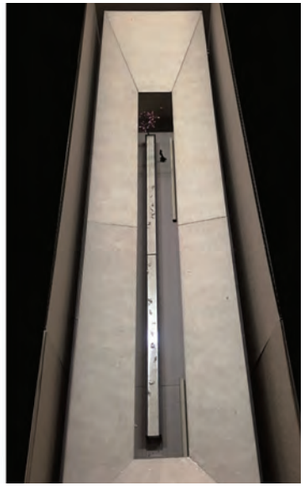
Ishaan Kumar, Sean McKay, Karli Scott and Elvis Wong, diagrams (above); Zhiqiang Zeng, model (opposite page)

CONTEMPORARY URBANISM

Instructors Richard Weller and David Gouverneur with Maria Villalobos
Teaching assistants William Fleming and Siyang Jing

Over half of the world's population today lives in cities, many of them large metropolitan areas, megacities and urban regions. The urbanization trend is expected to continue, particularly in the nations of the Global South. Climate change, environmental stress, scarcity of cheap energy, food and water shortages, and social and political conflicts will be at the center of professional practices. In order to be responsive to such challenges, advancing new criteria, design, planning and managerial solutions, it is of pivotal importance to understand the theoretical framework and the practices that have influenced city making throughout history, particularly those ideas and that still shape the contemporary city and will continue to do so in the near future. This course was divided into two parts. The first, The City in Theory concerned the history and theory of urban design in the developed world and was based on a series of five lectures by Richard Weller with a wrap-up lecture by David Grahame Shane. The second, Applying Urban Theories in the Global South concerned urbanization in the global south and was led by David Gouverneur. The course was specifically designed for students enrolled in PennDesign's Urban Design Certificate and students enrolled in LARP 602 Studio IV but also welcomed students from other disciplines.

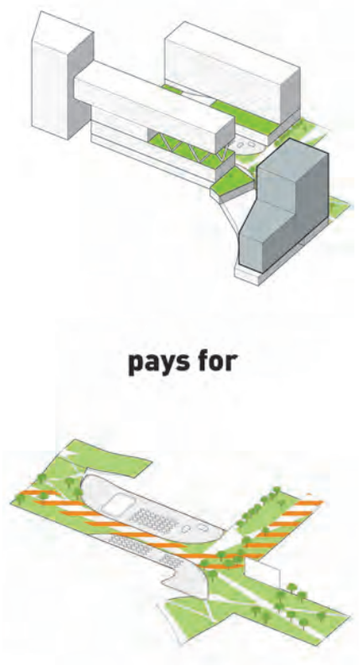




ELECTIVE COURSES

Urban Design Certificate (fall)
FUNDAMENTALS OF URBAN DESIGN
Instructor Stefan Al
This course helped students acquire the principles that inform urban design practice. The course had three major objectives: to help students understand the contemporary city through a series urban design tools; to address both historical and modern urban design principles; and to consider all the scales in which urban designers operate, ranging from the fundamentals of social interaction in public space, to the environmental sustainability of the region. Students applied ideas from readings, weekly assignments and case studies throughout the semester into a culminating design project for a section of Philadelphia known as the "superblocks." This low-density development sits in between the rapidly developing Old City and Northern Liberties neighborhoods. With development pressures from the surrounding area, students had the opportunity to provide a new vision for the superblocks that is compatible with twenty-first century Philadelphia.

Urban Design Certificate (spring)
IMPLEMENTATION OF URBAN DESIGN
Instructors Candace Damon and Alex Stokes
This course focused on the various ways in which urban design is affected by opportunities and constraints associated with market conditions, development feasibility, political and community dynamics and the various incentives and restrictions applied by the public sector to influence development. The course walked students through the process of proposing and refining a redevelopment plan for a parking lot located in the vicinity of the University of Pennsylvania. Students were tasked with demonstrating the feasibility of their redevelopment plan from a market, financial, community and public policy perspective. Students furthered their understanding of key concepts that drive urban transformation through case studies, group presentations, class debates and conversations with leading design, real estate and public sector professionals from the Philadelphia region and beyond.



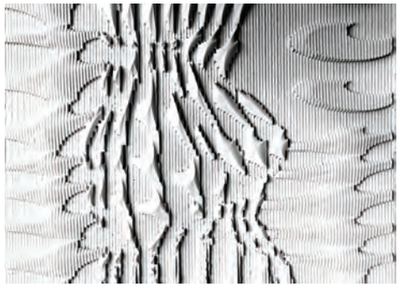
Nicholas McClintock, implementation of urban design (this page);

Yajun Dong, simulated natures (opposite page)

Topics in Professional Practice (fall)
TRANSFORMATIONAL LEADERSHIP: RESEARCH AND ACTION FOR DESIGNERS
Instructor Lucinda Sanders
Leading transformation in the 21st century is a complex process requiring individuals who are conscious, collaborative, secure in their vision, able to creatively extrapolate from traditional understandings of theory and practice, and have a balance of rational, intuitive and spiritual skills and aptitudes. Transforming perceptions is crucial to successful innovation and the key objective to change. The world of the 21st century needs more people who think like landscape architects and other conscious designers. This course aimed to deepen criticality and expose emerging landscape architects to the power of their own voices, and by doing so, to inspire more landscape architects to step forward and lead the significant conversations of the 21st century. This course provided a platform from which students could further this journey of transformation. Learning outcomes were expected in three primary areas: transformational leadership, research, and action. The course format relied upon active participation in discussions, weekly writing assignments, and the development of a semester-long draft research proposal presented at the conclusion of the course.

Topics in Digital Media (fall)
SIMULATED NATURES
Instructors Keith VanDerSys and Joshua Freese
This seminar explored the value and potential of the role or computer-aided analysis, design, and manufacturing (CAD/CAM) in landscape architecture. Computation has greatly expanded the means by which designers can engage the temporal and relational qualities inherent to the dynamic medium of landscape. Students engaged in combining the computational capacities of geospatial analysis (GIS), computational flow dynamics (Aquaveo, Ecotect), and parametric software (Grasshopper) to investigate new modes of defining, articulating, and reorganizing a small vacant site on the banks of the Delaware River. Demonstrations of essential tools and techniques were presented and discussed throughout the semester, along with relevant project examples, readings, and guest lecturers.

Topics in Digital Media (fall)
GEOSPATIAL SOFTWARE DESIGN
Instructor Dana Tomlin
The purpose of this course was to equip students with a selected set of advanced tools and techniques for the development and customization of geospatial data-processing capabilities. Students were introduced to the use of the JavaScript and Python computer programming languages in conjunction with Google's Earth Engine and ESRI's ArcGIS. The course was conducted in a seminar format with weekly sessions devoted to lectures, demonstrations, and discussions.



Topics in Digital Media (spring)
MODELING GEOGRAPHICAL SPACE
Instructor Dana Tomlin
The major objective of this course was to explore the nature and use of raster-oriented geographic information systems (GIS) for the analysis and synthesis of spatial patterns and processes. It was oriented toward the qualities of geographical space itself (e.g. proximity, density, or interspersion) rather than the discrete objects that may occupy such space (e.g. water bodies, land parcels, or structures). The course focused on the use of GIS for "cartographic modeling," a general but well-defined methodology that can be used to address a wide variety of analytical mapping applications in a clear and consistent manner. This is done by decomposing data, data-processing capabilities, and data-processing control techniques into elemental components that can then be recomposed with relative ease and with great flexibility. The result is what amounts to a "map algebra" in which cartographic layers for individual characteristics such as soil type, land value, or population are treated as variables that can be transformed or combined into new variables by way of specified operations. Just as conventional algebraic operations might be combined into a complex system of simultaneous equations, these cartographic operations might be combined into a model of soil erosion or land development potential.

Topics in Digital Media (spring)
ADVANCED TOPICS IN GIS
Instructor Dana Tomlin
This course offered students an opportunity to work closely with faculty, staff, local practitioners, and each other on independent projects that involved the development and/or application of geographic information system (GIS) technology. These projects often took advantage of resources made available through Penn's Cartographic Modeling Lab. The course was organized as a seminar – a series of weekly meetings and intervening assignments that ultimately lead to the implementation and presentation of student-initiated projects. Topics for these projects ranged from the basic development of geospatial tools and techniques to practical applications in a variety of fields.

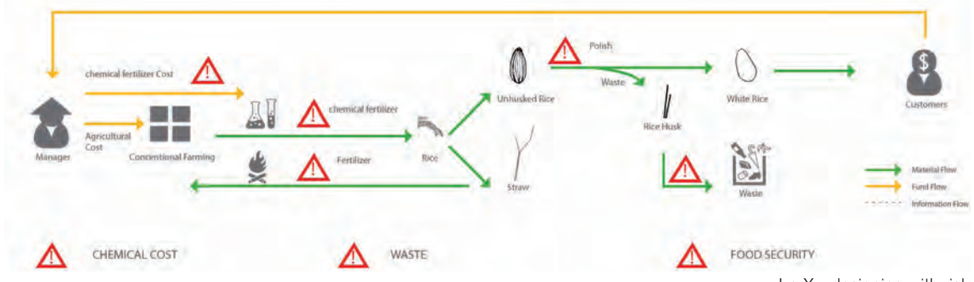
Topics in Construction, Horticulture and Planting Design (spring)
DETAILING IN LANDSCAPE DESIGN
Instructors Lindsay Falck and Abdallah Tabet
The detail is the moment of intersection between the conceptual and the practical, born out of the designer's effort to merge an idealized vision with a set of imposed – and often conflicting – parameters and constraints. For some, the detail may contain the essence of a project, a representation of the idea made manifest. Yet it may also be the reason the whole thing falls apart. Through case studies of exemplary projects, lectures, discussions, and design exercises involving drawing, modeling, and fabrication at a range of scales, this seminar course explored detailing as an idea, as a process, and as a vital component of design practice and construction methodology. This course offered students the opportunity to develop a strong grounding in the logic and language of details, supporting continued inquiry and critical engagement with design over the course of a career.

Topics in Construction, Horticulture and Planting Design (fall and spring)
ISSUES IN ARBORETUM MANAGEMENT I AND II
Instructor Cynthia Skema
This year-long course, which met at the Morris Arboretum in the Chestnut Hill section of Philadelphia, was designed as an introduction to all aspects of public gardens. Course topics included the role of gardens as public institutions; basic horticultural, botanical and ecological concepts and practices underpinning public garden management; the management and curation of living plant collections; as well as education, public programs, sustainability, historic preservation, and storm water management, as related to public gardens. This interdisciplinary course looked at public gardens as a whole, integrating both theoretical and hands-on, practical coursework, and often utilizing the Morris Arboretum as a case study.

Topics in Ecological Design (spring)
RECLAMATION OF LARGE-SCALE SITES
Instructor William Young
This course presented case studies and practical techniques for the restoration of large tracts of disturbed lands. The course began by introducing a background in scientific disciplines including chemistry and geology, with particular emphasis on the fundamentals of ecology. This hands-on course used examples of actual projects to practice the techniques for reclamation and development. There was a strong focus on site analysis and natural resource inventory, leading to informed and holistic site development and design. Guest lecturers contributed additional perspective and expertise on topics such as geology, soils, stormwater management and environmental permitting.

Topics in Theory and Design (fall)
CLASSICS CONSIDERED
Instructors Laurie Olin and Raffaella Fabiani Giannetto
The purpose of the course was to familiarize students with aspects of the physical design and realization of landscape, emphasizing its properties as a medium of expression, its materiality, and issues of craft, composition, and construction in relationship to functionality and poetics. The sites chosen were among those frequently considered representative of particular movements, periods, or exemplars of design excellence. This was not a "history" course per se, but rather a "design" analysis endeavor similar to the way students and faculty in literature study exemplar texts by highly regarded poets or novelists, studying their structure, context, ideas, and craft. This approach offered a unique opportunity for learning not only about the ideas, design choices and motivations behind existing projects, but also how the latter have been received and interpreted by others, particularly historians and critics who have developed written narratives of built work. Criticism, as the students discovered in this course, is tightly linked to theory, but it is also a consequence of specific approaches to history. Students learned how to discern the latter while also writing their own assessments of both built and written work.

Topics in Theory and Design (spring)
DESIGNING WITH RISK
Instructor Matthijs Bouw
Assistant Instructor Laurent Corroyer
This research seminar investigated designing with risk, particularly as it relates to the problem of climate adaptation and resilience. The aim of this course was to explore potential roles and tools of design as a means of responding to risk in spatial, infrastructural and policy projects at a variety of scales. In collaboration with faculty and thinkers in other disciplines, students developed a body of knowledge about risk and how it relates to streams of intellectual energy around resilience. Emphasis was placed on two risk types – systems resilience and coastal adaptation – in greater depth and from many standpoints, mixing philosophy, policy, economics, science, regulation, engineering technique and design. Research in this course helped shape a larger effort at PennDesign to position architects, landscape architects and planners as crucial allies in risk management.



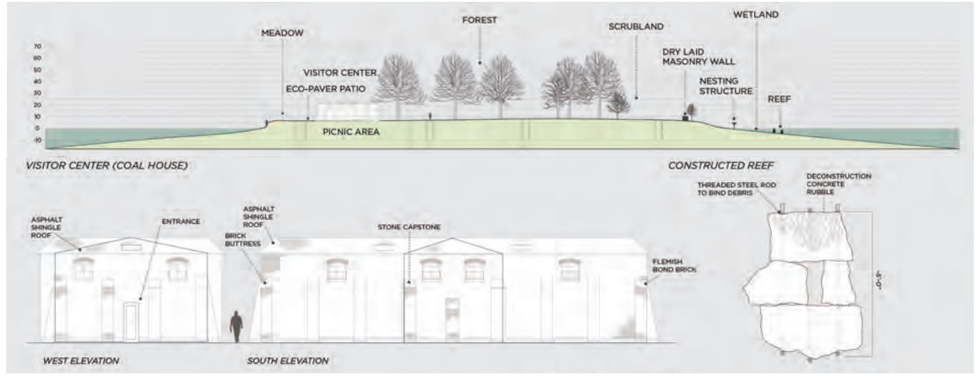
Le Xu, designing with risk

Topics in Theory and Design (spring)
WORK: ASPECTS AND TOPICS IN LANDSCAPE ARCHITECTURE
Instructor Laurie Olin
This course examined the nature of professional practice, its projects and typologies, in the past century and today. It examined issues regarding a number of project types, their genesis and production, from the instructor's perspective based on fifty years of practical experience: the clients, the politics, the design, production, and craft. Interaction and collaboration with clients and allied professionals, largely architects and engineers, was considered as well, but emphasis was placed upon design, its process and activity. Specific project typologies presented included: private gardens and estates; public parks – large and small, soft and hard; campus planning and design; community planning, development, and design; institutional grounds and settings; memorials and monuments; corporate and commercial facilities; infrastructure (highways, roads, streets, trails, harbors, water systems); regional and large district plans for resources, development, resilience; miscellaneous such as tourist, recreational and agricultural facilities.

INDEPENDENT THESIS STUDIO

HERITAGE ADRIFT: DESIGNING FOR NORTH BROTHER ISLAND IN THE FACE OF CLIMATE CHANGE
Student Angelina Jones
Faculty supervisors Richard Weller and Randall Mason

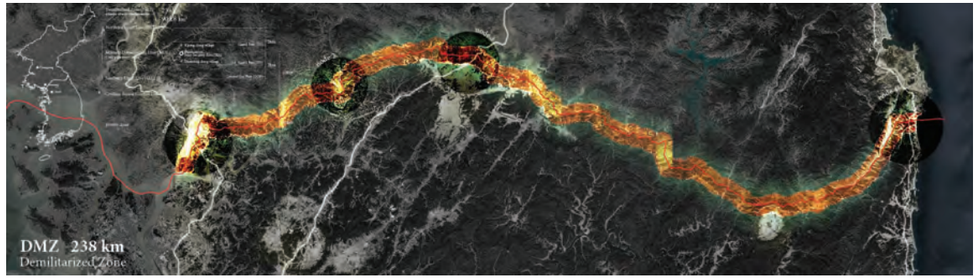
The smaller islands of the archipelago of New York City (NYC) have built heritage that reflects the history of quarantining undesirable and vulnerable populations in institutions such as hospitals, asylums, and prisons. North Brother Island (NBI) in the East River is one such place, home to Riverside Hospital and other institutions from 1885-1963. The NYC archipelago is vulnerable to multiple effects of climate change including sea-level rise, shoreline erosion, increased flooding, and storm surge. In order to confront the dangers that climate change presents to the built heritage on NBI, a hybrid approach of preservation interventions and landscape architecture strategies are needed. Using a values-based preservation approach as the foundation, this student developed a projective design to address shoreline erosion, building stabilization, selective deconstruction, and public access to NBI, which is currently managed as a bird sanctuary. She designed a low energy tidal zone on the rapidly eroding northeastern shore of the island using constructed reefs. The area of the island where colonial wading birds have nested is protected from human access with a dry-laid masonry wall. Both the reef and wall are constructed with debris recycled from buildings on the island that need to be deconstructed due to instability. The forestry strategy augments the existing vegetation on site and uses salt tolerant species in the meadow, woodland, scrubland, and wetland, which will all be increasingly inundated as sea-levels rise. The design solution will allow for limited and seasonal access to this island with a rich and important quarantine history.



Angelina Jones, sections

INDEPENDENT STUDY

PROACTIVE PRACTICE (fall)
Student Nicholas McClintock
Faculty supervisor Christopher Marcinkoski
For his independent study, the student conducted a series of case studies and business models of social impact design practices revealing the structural conditions under which these practices operate. His research supported the efforts of Proactive Practice, a side project he started in 2013 with practitioners Mia Scharphie and Gilad Meron. The team recognized a huge gap between the profession's interest in social impact design and actual knowledge about how to make such a practice financially and practically sustainable. His research revealed that social impact firms are innovating on traditional scopes of practice, fee structures, and skill sets that will make the design professions as a whole more sustainable in the future, and that most of the practices profiled essentially created a market for their services that would otherwise never have existed.



Chiyoung Park, map

AN ECO-PEACE PARK FOR THE KOREAN DEMILITARIZED ZONE (fall)
Student Chiyoung Park
Faculty supervisor Richard Weller
This independent study aimed to examine potential areas for an "eco-peace" park in the DMZ (demilitarized zone) and its adjacencies to foster better relations between South and North Korea. There are several precedents proposing planning strategies for not only the DMZ, but also the whole Korean peninsula. However, they have been mostly conceived of in two-dimensional form and have not taken sufficient account of the Korean landscape, which is more than 70% mountainous. This study focused on drawing the potential nodes for the corridors linking South and North Korea through precedent studies and mapping. The process continued by imagining a three-dimensional transformation of one of the nodes and ultimately proposed a scenario for the rest.

WETNESS AS A NEW GROUND (spring)
Student Hossain Labib
Faculty supervisor Anuradha Mathur
Dhaka is the capital of Bangladesh, a low-lying country located in the world's largest delta that defies articulation in terms of streams, tributaries and rivers. To face the threats of this inherently wet landscape (floods, sea-level rise), there is a necessity to explore the ground of the city. The main objective of this independent study was to explore wetness in the context of a particular territory and transect across Dhaka through a series of material and visual investigations that challenge taken for granted perceptions of land and city and boundaries they inevitably construct. Rather than characterize these as land-scapes, they were referred to as wet-scapes. The four areas of research included walking, montaging, fabricating material analogs, and visualizing specific lines of research through notational drawings, besides writing. There were three presentations and three short papers following the feedback from presentations. A final paper continued with these investigations and expanded them in searching for the "ground of wetness" in the context of Dhaka.

POLITICS OF MEMORY AND THE REPRESENTATION OF MEMORY (spring)
Student Jungyoon Bae
Faculty supervisor Lucinda Sanders
Japanese military sex slaves, known as "comfort women", were women forced into sexual slavery by the Imperial Japanese military during World War II. In the 70 years following the war, this issue has led to political, diplomatic and national disputes in East Asia. A conference between Japan and Korea in 2015 resulted in the Japanese government officially recognizing the crimes committed in the past. Through independent study, this student aimed to participate in the tide of history by proposing a new design methodology for a Japanese military sex slave memorial park. The resulting proposal was a written essay with drawings showing each step of study.

Junyoon Bae, montage detail

PERMEABLE SURFACES AND LAND SUBSIDENCE CONTROL IN CITIES (spring)
Student Hao Liang
Faculty supervisor Lucinda Sanders
Land subsidence – land collapse most often caused by the extraction of oil or water – can be a major problem in cities. Subsidence can cause cities huge expense through repair of underground infrastructure, increased investment in flood control, and the maintenance of homes. In Beijing and Shanghai, the existing methods to control land subsidence include regulating groundwater extraction, artificial groundwater recharging, and transfer of water from other cities, which can lead to further issues in the source city. A problem in many of the urban areas in China is the lack of soft or permeable surfaces that would maintain the natural recharge rate of groundwater. This independent study looked at this problem from the landscape architecture perspective by evaluating the sufficiency of permeable surfaces to mitigate ground subsidence.

SUMMER INSTITUTE AUGUST 3 - 21, 2015

For Entering 3-Year MLA Students

Week 1 DRAWING AND MEASURE
Instructors Rachel Johnston Pires and Abdallah Tabet
This five-day course for three-year MLA students explored drawing not only as a means of graphic representation and communication, but as a tool for seeing, measuring, and understanding the urban landscape – its objects, systems, spaces, relationships, and conditions. As designers, drawing is the primary method of interrogating and communicating ideas; this week was designed as a crash course in the fundamentals of architectural drawing, upon which the subsequent semester built. Students focused on precision, measure, legibility, and clarity of mark, exploring working methods to bring these qualities to drawn iterations of the urban landscape. The overarching aim of this week was to become familiar with the effects of an array of drawing tools and techniques, both technical and representational, and to begin to develop a visual vocabulary that could be expanded throughout the week and into the fall semester.

Week 2 LANDSCAPE OPERATIONS
Instructors Ari Miller and Rebecca Popowsky
This week-long course for three-year MLA students focused on landscape operations. It delved into the representation, construction, and manipulation of topography and landform. The shaping of the groundplane is a subject at the core of the landscape profession. The course introduced tools, techniques, and processes for designing with landform, and thoroughly explored the concepts of scale and contour. Using drawings and models, it developed a studio working method that emphasized the precise and the iterative testing of design proposals.

Week 3 NATURAL SYSTEMS
Instructors Sarah Willig and Kate Farquhar
Teaching assistant Nicholas Parisi
The purpose of this five-day session for the three-year MLA students was to develop an understanding of the plant communities typical of the Coastal Plain and Piedmont of southeastern Pennsylvania through exploration of natural areas and analysis of connections between climate, geology, topography, hydrology, soils, vegetation, wildlife, and disturbance. Students worked to develop a familiarity with the local flora (native and non-native) including plant identification and an understanding of preferred growing conditions and potential for use. Students continued this field investigation through the fall semester ultimately visiting natural areas from the Atlantic Ocean to the Appalachian Mountains.

For Entering 2-Year MLA Students

Week 1 INTRODUCTION TO DIGITAL MEDIA & ACADEMIC WRITING WORKSHOP
Instructors Keith VanDerSys (media) and William Fleming (writing)
The first week of Summer Institute for two-year students included two concurrent courses. This Digital Media course introduced students to the facilities of digital media as the primary mode of design visual communication. The course provided a short, yet intensive, hands-on inquiry into the production and expression of digital media that is essential for all designers. Through a series of working labs, students learned various software applications and associated techniques to execute precise two-dimensional representations of three-dimensional concepts. The week culminated with an individual project. In the Writing Workshop, students received a basic introduction to research methods, research resources, academic writing, citation formats and standards expected by the School of Design. The workshop aimed to provide students with the tools necessary to engage with the vast intellectual resources available at Penn and to develop their own voice as scholars of landscape architecture. The workshop consisted of three tutorial-based lectures and three collaborative assignments.

Week 2 NATURAL SYSTEMS
Instructors Sarah Willig and Kate Farquhar
Teaching assistant Colin Curley
The purpose of this five-day session for the two-year MLA students was to introduce the regional physiographic provinces (areas of similar geology and topography) and associated plant communities by moving roughly East to West over the course of the week. At each site, students characterized plant communities and considered the connections between climate, geology, topography, hydrology, soils, vegetation, wildlife, and disturbance. Students worked to develop a familiarity with the local flora (native and non-native) including plant species identification and an understanding of preferred growing conditions and potential for use.

Week 3 LANDFORM AND GRADING
Instructor Cora Olgyay
Teaching Assistant Taran Jensvold
The reading and shaping of landform is an elemental tool in the practice of landscape architecture. The act of grading design – the manipulation and sculpting of the earth – is both art and science. This week-long course for two-year MLA students aimed to provide an appreciation of landform as both an evocative component in the design vocabulary and as a critical tool in resolving difficult design problems. Basic techniques and strategies of grading design were introduced and reinforced, so that grading design becomes an integral part of the students' design approach. This workshop was intended to provide a concise overview of the principles and process of landform and grading design, and was designed to prepare the entering two-year students for Workshop III. Students investigated the integral relationship between landscape components: geology, topography, soils, climate, hydrologic processes, vegetation, disturbance, and finally human inhabitation and intervention. This framework of natural systems provided the setting for the primary focus of the course: the intentional manipulation of topography through grading design.

LECTURES

Gary Hilderbrand
Partner, Reed Hilderbrand, Boston
“Visible / Invisible”
September 14, 2015
Co-sponsored by Historic Preservation

Keith Bowers
President Biohabitats, Charleston
“Restoring the Future: What exactly does that mean in a rapidly changing world?”
September 29, 2015

Jacinta McCann
Executive Vice President, AECOM, San Francisco
“Jigsaw City: The Role of Landscape in the Rise of Chinese Cities”
November 11, 2015

Dirk Sijmons
Professor and Chair of Landscape Architecture TU Delft, The Netherlands
“Personal Public Space”
December 2, 2015

Josep Maria Garcia Guentes
Assistant Professor, Newcastle University, School of Architecture, Planning and Landscape
“Mountainous Barcelona: A History of the City, its Parks and Architecure”
December 3, 2015

Thomas Balsley
Principal Designer, Thomas Balsley Associates, New York City
“Thomas Balsley - Uncommon Ground”
February 4, 2016

Shane Coen
Principal, Coen + Partners, Minneapolis
“Contextual Minimalism”
February 17, 2016

Kim Mathews / Signe Nielsen
Partners, Mathews Nielsen Landscape Architects, New York City
“Planting Design: Approach and Process”
March 21, 2016

Peter Walker
Principal, PWP Landscape Architecture, Berkeley
The Annual Ian L. McHarg Lecture
March 30, 2016

SYMPOSIA

Work & Days
Organized by: Richard Weller, Katie Black and Colin Curley
Participants included: Javier Arpa, Sierra Bainbridge, Alexa Bosse, Lois Brink, Ignacio Bunster-Ossa, Nette Compton, David Gouverneur, Bill Hartman, Aaron Kelley, Alexis Landes, Stacy Levy, Tim Love, Ellen Neises, Daniel Pittman, Lucinda Sanders, Lola Sheppard, and Richard Roark
April 8, 2016
Co-sponsored by the PennDesign Dean’s Office

The New Landscape Declaration: A Summit on Landscape Architecture and the Future
Participants included: Diane Jones Allen, Jose Alminana, Gerdo Aquino, Thomas Balsley, Julie Bargmann, Henri Bava, Anita Berrizbeitia, Charles Birnbaum, Keith Bowers, Jackie Bowring, Joe Brown, Ignacio Bunster-Ossa, Nina Chase, Nette Compton, Claude Cormier, James Corner, Azzurra Cox, Julia Czerniak, Mark Dawson, Elen Deming, Barbara Deutsch, Susannah Drake, Tim Duggan, Martha Fajardo, Mark Focht, Gina Ford, Christian Gabriel, Edward Garza, Christophe Girot, Maria Goula, David Gouverneur, Kona Gray, Adam Greenspan, Deb Guenther, Kathryn Gustafson, Feng Han, Andrea Hansen, Susan Herrington, Randy Hester, Kristina Hill, Alison Hirsch, Jeff Hou, Scott Irvine, Mark Johnson, Joanna Karaman, Mikyoung Kim, Mia Lehrer, Nina-Marie Lister, Christopher Marcinkoski, Liat Margolis, Deborah Marton, Anuradha Mathur, Jacinta McCann, Adrian McGregor, Karen M’Closkey, Allyson Mendenhall, Blaine Merker, Beth Meyer, Brett Milligan, Timothy Mollette-Parks, Kathryn Moore, Alpa Nawre, Forster Ndubisi, Ellen Neises, Cornelia Hahn Oberlander, Patricia O’Donnell, Laurie Olin, Kate Orff, Raquel Penalosa, John Peterson, Patrick Phillips, Sarah Primeau, Chris Reed, Stephanie Rolley, Lucinda Sanders, Mario Schjetnan, Martha Schwartz, Kelly Shannon, Dirk Sijmons, Ken Smith, Laura Solano, Nancy Somerville, Anne Whiston Spirn, Fritz Steiner, Carl Steinitz, Antje Stokman, Marilyn Jordan Taylor, Marc Treib, Charles Waldheim, Peter Walker, Richard Weller, Marcel Wilson, and Kongjian Yu
Hosted by the Landscape Architecture Foundation and PennDesign, held at the University of Pennsylvania
June 10-11, 2016
Co-sponsored by PennDesign and the Department of Landscape Architecture

EVENTS

PennDesign ASLA Alumni and Friends Reception
Cliff Dwellers Club, Chicago; November 7, 2015

PennDesign Thanksgiving Dinner
November 24, 2015

PennDesign Lunar New Year Celebration
February 5, 2016

PennDesign DiverseDesign: Justice + Space II
Day of Awareness, April 2, 2016
Day of Action, April 3, 2016

PennDesign Awards Ceremony, May 15, 2016
Commencement, May 16, 2016

PennDesign 2016 Year-End Show
May 13 - June 12, 2016
Opening Reception: May 13, 2016

Penn Career Services Events
PennDesign Internship Panel, November 4, 2015
PennDesign Portfolio Preparation Panel, November 18, 2015
Career Connection Day, Career Fair, February 26, 2016

Portfolio and Resume Review
January 29, 2016
Sponsored by the PennDesign Alumni Association

STUDENT ORGANIZED EVENTS

PD ASLA Student Chapter Events
Chapter officers:
Zhangkan Zhou, president
Sean McKay, vice president
Yiqing Wu, treasurer
Sarah Yassine, secretary
Ben Summay, communications

Brown Bag / Morning After Sessions
Keith Bowers, September 30, 2015
Bill Hartman, “Private Land Conservation,” October 28, 2015
Jacinta McCann, November 12, 2015
Lindsay Rule, “Vertical Cities Compeition,” November 18, 2105
Dirk Sijmons, December 3, 2015
Karen M’Closkey
Richard Weller
Adam Supplee

Internship Discussion Panel and Q & A
February 24, 2016

ANNOUNCEMENTS

PennDesign's Master of Landscape Architecture Program was ranked second in America's Best Architecture & Design Schools 2016, a national survey of professionals with direct experience hiring and supervising recent architecture and design graduates. The research is conducted annually by DesignIntelligence on behalf of the Design Futures Council.

The Landscape Architecture Foundation (LAF) and PennDesign hosted **The New Landscape Declaration: A Summit on Landscape Architecture and the Future** on Friday and Saturday, June 10 and 11, 2016 at the University of Pennsylvania. The event celebrated the 50th anniversary of the "Declaration of Concern" drafted by Ian McHarg and others in 1966. There were over 70 speakers and over 700 attendees. (See events listing on page 62 for more details.)

Departmental publications

LA+ Interdisciplinary Journal of Landscape Architecture, is being published twice a year by ORO Editions. The second issue *LA+ Pleasure* came out in the fall of 2015 and the third issue *LA+ Tyranny* came out in the spring of 2016. The fourth issue *LA+ Simulation* is due out in the fall of 2016. Editor-in-chief **Tatum Hands** and faculty advisor **Richard Weller** are working with the student sub-editors on *LA+ Risk* and *LA+ Identity*. Students **Josh Ketchum, Jinah Kim, Luke Van Tol** and **Ellen Xie** are working on the Identity issue and **Sean McKay, Elvis Wong, Wesley Chiang** and **Clay Gruber** are working on the Risk issue.

LA+ is generously supported by the following donors – Gold Patrons: Andropogon, James Corner Field Operations, Hollander Design, Mathews Nielsen, !melk, OLIN, Starr Whitehouse, W Architecture and Landscape Architecture; Silver Patrons: bionic, Stoss, McGregor Coxall, Terrain Studio; Bronze Patrons: Aspect Studios, PEG+ola, Snøhetta, T.C.L. Landscape Architecture, Thomas Balsley Associates, Reed Hilderbrand, TOPOTEK 1 and Workshop: Ken Smith.

PennDesign and the digital publication *Scenario Journal* continue their affiliation. Lecturers **Stephanie Carlisle** and **Nicholas Pevzner** are the editors-in-chief. The journal investigates complex urban landscape and infrastructural issues, focusing on interdisciplinary conversations between design, environmental science, engineering, and art.

Students

Katie Black, MLA '16, and dual MLA/MArch student **Colin Curley,** organized "work & days" a symposium on design careers in the 21st century which was held on Friday, April 8, 2016. They were assisted by professor and chair Richard Weller.

MLA students **Melissa Flatley** and **Hallie Morrison** were the winners of the School of Design's 2016 Susan Cromwell Coslett Traveling Fellowship for summer travel to visit gardens and landscapes in Mongolia.

Jie Xu, MLA/MArch '16 was one of the winners of the 2016 PA-DE ASLA Chapter Scholarship.

Students in associate professor **Karen M'Closkey**'s fall 2015 advanced level elective studio participated in the Community Design Collaborative design competition by designing innovative outdoor play spaces for a Philadelphia public school, library and recreation center. Students were: **Katie Black, Shengnan Hou, Siyang Jing, Haoran Li, Hao Liang, Jierui Wei, Lok Wai Wong, Wen Shang, Rui Zhao,** and **Zhangkan Zhou**.

Nate Wooten, MLA '16 was PennDesign's nominee to the Landscape Architecture Foundation's Olmsted Scholars Program in 2016.

Faculty

Frederick "Fritz" Steiner was appointed Dean and Paley Professor of PennDesign in March 2016. His term began on July 1, 2016. Dean Steiner will hold joint faculty appointments in the departments of Landscape Architecture and City and Regional Planning.

In February 2016 the Metropolitan Redevelopment Authority of Western Australia delivered the city of Perth a major new landmark with the opening of Elizabeth Quay, a much-anticipated waterfront redevelopment project that professor and chair **Richard Weller** helped design. The public celebration came after seven years of controversy, two different governments, and innumerable phases of design development.

Richard Weller served as the Creative Director for the 50th Anniversary Festival of Landscape Architecture in Australia held during October 2016 in Canberra.

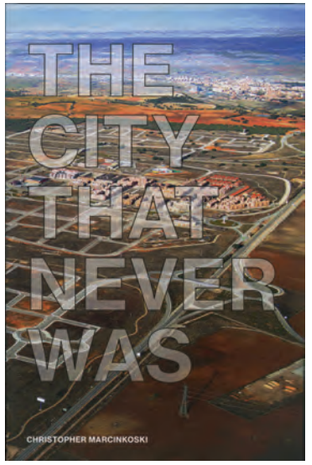
Practice professor **Laurie Olin**, RLA, FASLA was the inaugural recipient of The CELA Lifetime Achievement Award presented at the CELA Dilemma: Debate annual conference at Utah State University in March 2016.

Adjunct professor **Lucinda Sanders** received the G. Holmes Perkins Award for Distinguished Teaching by a Member of the Associated Faculty from the School of Design in May 2016.

Assistant professor **Christopher Marcinkoski** 's new book *The City That Never Was*, was published in November 2015 by Princeton Architectural Press. Marcinkoski was in Rome during the spring 2016 semester for his Rome Prize Fellowship in Landscape Architecture. He was promoted to Associate Professor with tenure effective July 1, 2016.

Professor **James Corner** was promoted to Professor Emeritus on July 1, 2016.

Associate professor of practice **David Gouverneur** and adjunct professor **Valerio Morabito** were reappointed to five year terms on July 1, 2016.



Christopher Marcinkoski

STUDENT AWARDS

Ian L. McHarg Prize
Established in 2001. Awarded to a graduating student who has demonstrated excellence in design and best exemplifies ecological ideals in contemporary and culturally pertinent ways. This prize is awarded in memory of Ian L. McHarg, 1920-2001, distinguished professor of landscape architecture, pioneer of ecological design and planning, and one of the most influential landscape architects of the twentieth century.
Awarded to **Nathaniel Wooten**

Laurie D. Olin Prize in Landscape Architecture
Awarded to a graduating student who has achieved a high academic record and demonstrated design excellence in the making of urban places. Laurie D. Olin is one of the world's foremost leaders in contemporary landscape architecture and founder of the internationally acclaimed OLIN studio in Philadelphia, designing some of the world's most significant urban public spaces. Established in 2010 by the OLIN studio in honor of practice professor Olin who has served on Penn's faculty of landscape architecture since 1974. Awarded to **Hannah Davis**

Faculty Medal in Landscape Architecture
Awarded to a graduating student with an excellent academic record and outstanding contribution to the school in leadership. Awarded to **Zhangkan Zhou**

John Dixon Hunt Prize in Theory and Criticism
Awarded to a graduating student who has shown particular distinction in the theoretical and critical understanding of landscape architecture. The prize was established in 2004 and renamed in 2010 to honor the distinguished career of professor emeritus John Dixon Hunt. Awarded to **Angelina Jones**

Eleanore T. Widenmeyer Prize in Landscape and Urbanism
Established in 2004 through a bequest by Eleanore T. Widenmeyer in memory of her parents, Arthur E. Widenmeyer, Sr. and Lena R. Widenmeyer, is awarded to a graduating student who has achieved a high level of design synthesis between landscape and urbanism. Awarded to **Siying Xu**

Narendra Juneja Medal
Awarded in memory of associate professor Narendra Juneja, who served the department with distinction from 1965-1981, to a graduating student who has demonstrated deep exceptional commitment to ecological and social ideals in landscape architecture. Awarded to **Lok Wai Wong**

Narendra Juneja Scholarship
Awarded in memory of associate professor Narendra Juneja, who served the department with distinction from 1965-1981, to a continuing student in landscape architecture for academic excellence and demonstrated need.
Awarded to **Jieping Wang**

George Madden Boughton Prize
Established in 1986 by Jestena C. Boughton in memory of her father, George Madden Boughton. Awarded to a graduating student in landscape architecture for design excellence with environmental and social consciousness and evidence of potential for future effective action in the field of landscape architecture. Awarded to **Kathleen Black**

Robert M. Hanna Prize in Design
Awarded to a graduating student who has demonstrated great care for the craft, making and construction of landscape architecture. Established in 2010 by the OLIN studio in memory of Robert M. Hanna (1935-2003), who served on Penn's faculty of landscape architecture from 1969 to 1998.
Awarded to **Chiyoung Park**

Mr. and Mrs. William L. Van Alen Traveling Fellowship
Awarded to one landscape architecture student and one architecture student, in the second year of their programs, for summer travel to Europe. Awarded to **Nathaniel Wooten**

ASLA Awards
Certificates of Honor and Merit awarded to graduating landscape architecture students who have demonstrated outstanding potential for contributions to the profession.
Certificates of Honor awarded to **Nicholas McClintock, Lok Wai Wong and Siying Xu**
Certificates of Merit awarded to **Hannah Davis, Nathaniel Wooten and Zhangkan Zhou**

Wallace Roberts and Todd Fellowship
Established in 1991. Awarded to an outstanding landscape architecture student who has finished the second year of the three-year program. Awarded to **Chaowei Chang**

OLIN Partnership Work Fellowship
Established in 1999. A prize and a twelve-week internship awarded to an outstanding Master of Landscape Architecture student entering the final year of his or her study. Awarded to **Le Xu**

Chair's Acknowledgement Award for Service
Inaugurated in 2013. Awarded to a single student or small group of students who have made an exceptional extracurricular contribution to the program. Awarded to **Yajun Dong and Siyang Jing**

Chair's Acknowledgement Award for Design Progress
Inaugurated in 2013. Awarded to a first year student in the three-year Master of Landscape Architecture program who has demonstrably advanced the furthest in their design capability across the course of their first year of study.
Awarded to **Christian Cueva**

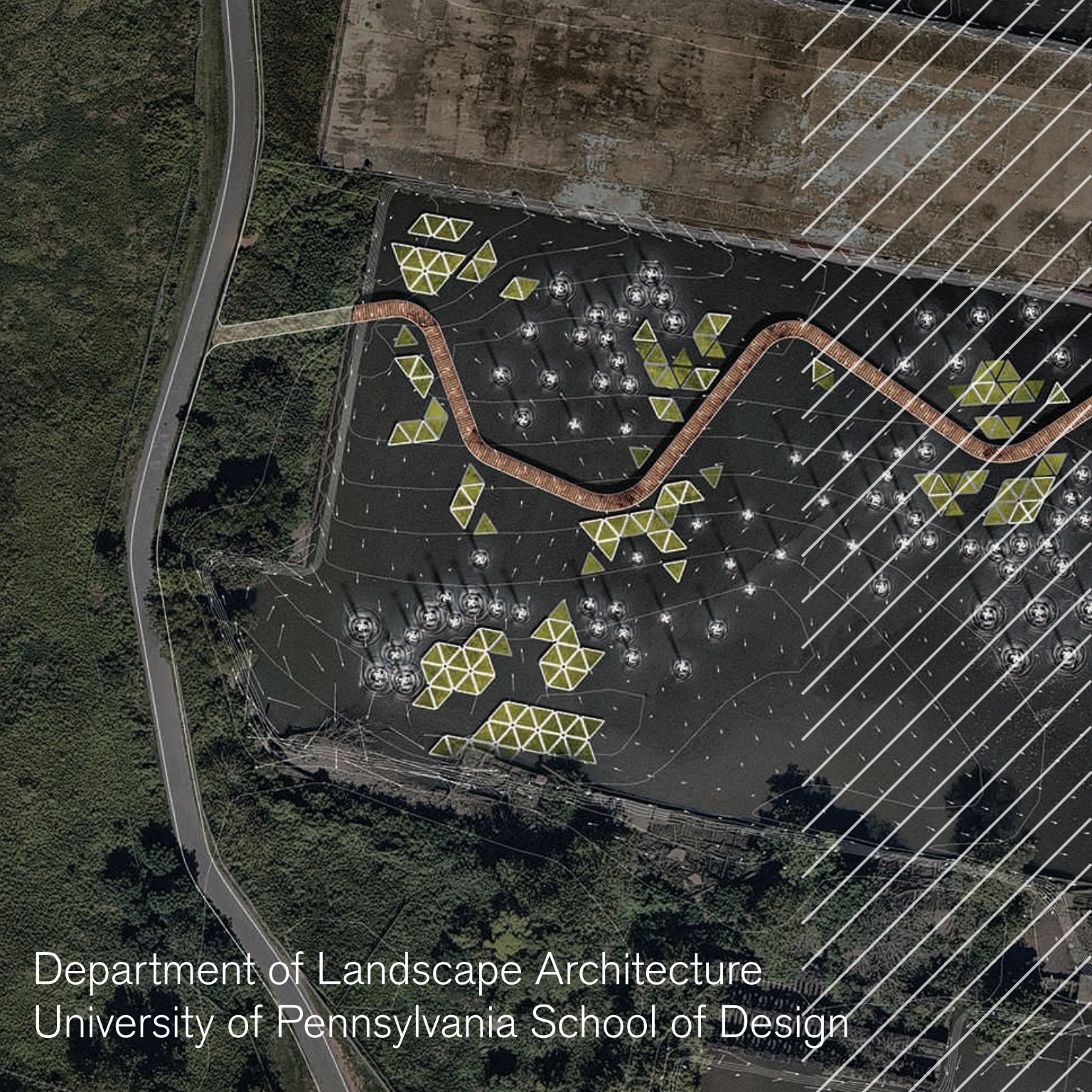
GRADUATES

Master of Landscape Architecture

December 2015
Chiyoung Park

May 2016
Jungyoon Bae
Kathleen Black
Sheng Cai
Ningxiao Cao
Adrian Cortinas
Hannah Davis
Yu-Sheng Dent
Yi Ding
Yajun Dong
Jonathan Hein
Shengnan Hou
Taran Jensvold
Siyang Jing
Angelina Jones
Emily King
Haoran Li
Hao Liang
Nicholas McClintock
Paula Narvaez
Veronika Ortega
Denisse Paredes
Ziwei Wang
Jierui Wei
Lok Wai Wong
Nathaniel Wooten
You Wu
Xiaoye Xing
Boqian Xu
Siying Xu
Xinnan Xu
Jie Xu
Lanmuzhi Yang
Ya You
Wen Zhang
Rui Zhao
Zhong Zhao
Zhangkan Zhou
Luyao Zhu

MLA Class of 2016



Department of Landscape Architecture
University of Pennsylvania School of Design