

SYLLABUS

Washington University in St Louis
Sam Fox School of Design and Visual Arts

OPTIONAL UNDERGRADUATE STUDIO: ARCH 312 / 412

Social Ecologies of Harlem

Spring 2016

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Studio meeting times: M + W + F 1:00-5:00
Credit hours: 6



Introduction

Ecological urbanism is a productive approach to city development that emphasizes environmental systems both as structuring mechanisms for urban form, and as environmental, social and economic resources. This studio explores an environmental design practice that focuses on the expansion of social and environmental justice through the development of interventions in the North Saint Louis Harlem watershed.

Rigorous analytical methodologies structured by the concept of ecological urbanism will be deployed to develop site-specific, environmentally just interventions within the Harlem watershed. The results of this studio will be shared with the City of St Louis to feed directly into the wider research currently being undertaken by their Urban Ecology and Vitality Initiative (UEV).

The UEV is a group of organizations, institutions and individuals who have been brought together to assist in the development of pilot projects, a City of St Louis biodiversity atlas and a natural resource inventory and analysis. This loose confederation of experts includes faculty from Wash U's master of landscape architecture and environmental studies group.

The studio will engage research-by-design methodologies to explore opportunities for the design of ecological and public open space networks. Additionally, it will identify key locations for re-investment through the strategic re-intensification of the urban fabric. Results of this studio will be fed back into UEV's wider research initiatives.

Aim

To introduce students to the fundamental principles and concepts underpinning landscape architecture and urban design through the analysis of an urban situation undergoing major transformation and the employment of natural and human systems as generators of design.

Learning Outcomes

At the end of this studio students will be able to:

1. Successfully deploy techniques of reconnaissance and discovery to investigate human and non-human systems at site and situational scales.
2. Employ a range of mapping techniques to identify and analyze social, economic and environmental patterns and systems and use these to determine appropriate sites for intensification.
3. Apply a conceptual framework based on ecological urbanism and informed by a robust appreciation of environmental justice to develop site-specific interventions
4. Effectively communicate design strategies, both graphically in the form of exhibition boards, and verbally in reviews.

Studio Overview

The Harlem watershed in North St Louis was home to some of the city's most vibrant neighborhoods including Wells-Goodfellow, Jeff Vanderlou and The Ville - the so called 'cradle of culture' for Black St. Louis in the 1920's and 30's and one of the few areas in the city where African-Americans could own property. Deindustrialisation, shifts in demographics, economic hardship and long-term underinvestment have brought distress to these once thriving neighborhoods.

The Harlem creek used to flow through this area but around 1920 it was contained in an underground pipe. The size of the installed pipe was calculated on only 10 years of rainfall data and an imperfect understand of hydrology. There was also considerably less impervious surface at that time. This pipe still exists but is wholly inadequate. To exacerbate the problem, stormwater and sanitary sewage are combined in this same pipe. Heavy rain frequently causes a system overflow, sending untreated water onto streets and into basements, a problem that has persisted in the district since the creek was first put underground. This places additional strain on what are already stressed neighborhoods.

The Metropolitan Sewer District (MSD) has recently been granted funds to build a series of detention basins in the adjacent Harlem and Baden watersheds. In Harlem, the lowest part of the watershed is framed by Natural Bridge Road to the north and Dr Martin Luther King Drive to the south. The creation of detention basins will require the removal of a significant number of houses right through a two mile stretch, directly affecting at least five neighborhoods, all of which are currently underserved, under stress and predominantly Black. Typically detention basins are inaccessible areas of mown grass surrounded by a high fence. Dead areas. While the removal of houses to create fenced and locked voids adds to the already severely eroded built fabric, potentially exacerbating the challenge of maintaining a cohesive community, it also provides opportunity.

The additional land released by the removal of the houses through the Harlem watershed has the potential to be integrated into the existing landscape and reformulated as **a networked social ecology of extraordinary productivity and vitality.**

Urban Ecology & Vitality Initiative

The St Louis Urban Ecology and Vitality Initiative (UEV) leverages greenspace to build social, economic and environmental sustainability by reconnecting St Louisans with urban nature. The UEV has identified Harlem as one of nine pilot projects within the city where they will develop and test processes and techniques that have both direct and indirect benefits on the citizenry. Research has shown that potential benefits of greenspace include significant health and educational outcomes (including reduced ADHA symptoms, higher academic achievement and increased fitness levels), augmented property values and business opportunities, and multiple environmental benefits such as increased biodiversity, wildlife corridors, carbon sequestration, and decreased surface water runoff (not incidentally saving millions of dollars on stormwater management).¹

Ecological Urbanism

Urban design is not simply ‘architecture at a larger scale’, nor is **landscape architecture** just planted matter. Both urban design and landscape architecture are **systems** based approaches to designing the urbanistic project. Cities comprise layered and complex territories, where public and private realms operate both regionally and locally. Systems include environmental systems such as water management, ruderal ecologies and brownfield considerations; economic systems include tax incentives and real estate development variables; social systems with their associated layers of urban histories in St. Louis; and spatial, material, organizational and circulatory systems which inform typologies of the city and other patterns of urbanization.

Christopher Hight claims that **ecology** has transcended its original disciplinary boundaries in the natural sciences to encompass a multidisciplinary framework that includes the social sciences, history, the humanities, design and the arts.² Mohsen Mostafavi in his book *Ecological Urbanism* discusses the need for ‘speculative design innovations rather than a form of technical legitimation for promoting conventional solutions,’³ in other words, we need a different approach to the design of the urban. With an emphasis on Hight’s expanded concept of ecology, this studio will explore the potential of **ecological urbanism** to formulate innovative design interventions that can leverage the potential of selected terrain and work with uncertain futures.

Task

If Urban Ecology is ‘to understand the structure and function of integrated socio-ecological systems in all their spatial, temporal and organizational complexity’⁴ then the first task of the studio is to first discover what spatial, temporal and organizational systems (human and non-human) are at work in the study area. The second is to harness these systems in the design of a new kind of performative urban terrain.

Important Note

The studio class has been granted access to information, some of which is highly sensitive. Under no circumstances are any of maps, reports or other data from external sources to be shared with anyone outside of the studio without the instructor’s explicit permission.

Work generated by this studio will be shared with the St. Louis Urban Ecology and Vitality Initiative and their partners and may be used in community meetings to help facilitate discussion and engage community members with new ways of thinking about possible development scenarios in their neighborhood.

¹ City of St. Louis Urban Vitality & Ecology pamphlet (n.d.)

² Hight, Christopher. “Designing Ecologies.” In *Projective Ecologies*, edited by Chris Reed and Nina-Marie Lister, 84–105. New York: Harvard University Graduate School of Design / Actar Publishers, 2014.

³ Mostafavi, Mohsen, and Gareth Doherty. *Ecological Urbanism*. Baden: Lars-Muller Publishers, 2010. p.17
<http://www.cartinstitute.org/>

⁴ Cary Institute of Ecosystem Studies. www.caryinstitute.org

Readings

Initial readings are listed below. Additional readings will be assigned as required throughout the semester.

Barnett, Rod. *Emergence in Landscape Architecture*. Oxford and New York: Routledge, 2013. **Chapter 6: Propositions**

Czerniak, Julia. "Looking Back at Landscape Urbanism: Speculations on Site." In *The Landscape Urbanism Reader*, edited by Charles Waldheim, **pages 105–23**. New York: Princeton Architectural Press, 2006.

Dramstad, Wenche E, James D Olson, and Richard T. T. Forman. "Selections from 'Landscape Ecology Principles in Landscape Architecture and Land-Use Planning.'" In *Projective Ecologies*, edited by Chris Reed and Nina-Marie Lister, **pages 126–33**. New York: Harvard University Graduate School of Design / Actar Publishers, 2014.

Lister, Nina-Marie. "Insurgent Ecologies: (Re)Claiming Ground in Landscape and Urbanism." In *Ecological Urbanism*, edited by Mohsen Mostafavi. **pages 536–547**. Baden: Lars Muller Publishers, 2010.

Pickett, Steward T., Mary L. Cadenasso, and Brian McGrath. "Ecology of the City as a Bridge to Urban Design." In *Resilience in Ecology and Urban Design: Linking Theory and Practice for Sustainable Cities*, edited by Steward T. Pickett, Mary L. Cadenasso, and Brian McGrath, vol 3, **pages 7–28**. Future City. Dordrecht: Springer, 2013.

Sketchbook

An essential part of design learning is keeping a journal to record site observations, information and analysis, and design ideas through hand drawings and sketches, graphic experiments and diagrams all augmented with notes as needed; any and every insight that pertains to the growing understanding of design.

A sketchbook is a detailed record of explorations and progress in the design process; it is meant to be a journal of the work in progress not a finished product. For the duration of this studio, a sketchbook must be used regularly; all entries should be dated and given a caption in order to chart progress and insights.

Sketchbooks should always be at hand during desk crits and reviews and will be submitted for periodic reviews and formative evaluation.

Studio Culture

Students should consider studio their **primary working space**. This collective learning environment is a central component of design culture and is a unique opportunity to capitalize on the interaction with instructors and colleagues, and gain exposure to projects being developed in other studios.

This open and collaborative culture requires students to be mindful and considerate of the noise and materials generated by the work, and the impact on others in and around the studio. Studio culture fosters learning through the discussion of projects, the sharing of knowledge and the critique process.

File storage

The Sam Fox School offers access to WUSTL Box for online storage. It is a space to store and access shared files and projects will be turned in here. Students must not make changes to a shared file – it must be copied to a personal hard drive and re-named. As with all digital media Box is not 100% proof against crashing so all personal files should be regularly backed-up elsewhere. Lost files are not an acceptable excuse for turning in required work late. Please see the *Sam Fox Technology Manual* for instructions on how to connect to WUSTL Box through your personal computer.

Attendance Policy

Attendance in class, individual reviews with instructors and teaching assistants, and class reviews are mandatory. It is important that all students be in class promptly at 1.00 pm. Arriving later than 8 minutes past the scheduled time will be considered an unexcused tardy. Arriving later than 15 minutes or leaving early, unless authorized by the instructor, will be considered an unexcused absence. 3 unexcused tardies will constitute an unexcused absence. More than one unexcused absence will lower the overall course grade by a degree for each subsequent absence (ie. A to A-). Beyond 3 unexcused absences could result in class failure. No work will be accepted for grading if its evolution has not been observed and critiqued during studio.

In addition to class time, course communication will occur through email. It is imperative that you check your WUSTL email on a regular daily basis (several times a day).

Academic Integrity

Effective learning, teaching and research all depend upon the ability of members of the academic community to trust one another and to trust the integrity of work that is submitted for academic credit or conducted in the wider arena of scholarly research. Such an atmosphere of mutual trust fosters the free exchange of ideas and enables all members of the community to achieve their highest potential.

In all academic work, the ideas, drawings, photographs, written texts and contributions of others must be appropriately acknowledged through citation, with the name of the author and full reference of the source. See <http://arts.wustl.edu/~writing/plagiarism.htm> for more information on properly documenting any work or ideas that are not your own. Work that is presented as original must be, in fact, original. Faculty, students, and administrative staff all share the responsibility of ensuring the honesty and fairness of the intellectual environment at Washington University. Students must be the sole authors of their work from concept through production.

Graduate School of Architecture, Landscape Architecture and Urban Design students are currently governed by the Academic Integrity policy of the Sam Fox School of Design & Visual Arts:

http://www.samfoxschool.wustl.edu/files/Final_12-6_Architecture%20Graduate%20AI%20Policy-1_final2.pdf.

Students should become familiar with the guidelines and policies of the university and school regarding academic integrity and misconduct. Any questions or concerns should be immediately addressed. Your instructors, advisors and department faculty are available to help students understand the Academic Integrity Policy, how to avoid plagiarism and its serious consequences by learning to cite sources correctly and leaving plenty of time to complete assignments. Do not hesitate to ask for assistance with any concerns in these regards.

Intentional plagiarism may result in a failing grade for this class. If you are not certain what constitutes plagiarism, please ask your instructor.

Evaluation and Grading

Each student's final grade will be determined by the student's progress throughout the course (participation, assignments, etc.) and final product of each project. This includes the quality of interaction, production, craft, content and presentation of the student's work in addition to student's contribution to the studio community. Students must engage in active discussions regarding the progress of their work. Projects will not be accepted that haven't been reviewed by the instructor. Late and incomplete work will not be accepted unless the student has a valid excused absence. Students will be expected to participate in all class discussions, field trips and reviews.

Participation is critical for your progress and is therefore required.

The criteria on the next page will be used in evaluation of a participant's progress during the semester, and will be used to determine final grade.

Grading

Grade evaluations will be based on consistent, high quality work over the entire semester. Students will be evaluated on their timely and thorough completion of assigned work, the depth of their exploration and consideration, as well as their level of professional competence in presentation of work. Students will receive a mid-semester grade and end of semester grade evaluation. The mid-semester grade is **formative** only, ie acts as an indication to the student of progress at that point. End of semester grades will be based on the **final submitted work as a whole**. This allows students the opportunity to improve their performance from mid-semester. Grades will be assigned according to the following criteria:

A grade of "**A**" is reserved for exemplary work that is attended to with initiative beyond the description of the stated problem; work that makes evident a significant understanding of the problem, and demonstrates mastery and integration of the required skills; work that is attended by an attitude for exploration, investigation, inquiry, open-mindedness, and a willingness to benefit from criticism.

A grade of "**B**" is given for some exemplary work that shows an understanding of the problem, displays a conceptual foundation, and is well crafted and complete; shows competence and mastery of skills; attended with an open and inquisitive attitude. This grade is seen to represent the average expected solution and therefore will be most prevalent.

A grade of "**C**" is given for adequate work that meets all the requirements of the problems and the course; shows an understanding of the problem while acknowledging some deficiencies; shows reasonable competence of skills and concepts.

A grade of "**D**" is given for work that, although complete, does not show an understanding of the problem, and demonstrates a deficiency in the mastery of skills. This work may often be attended with an argumentative or close-minded attitude, particularly with respect to criticism and self-motivation.

A grade of "**F**" is given for failing work that does not significantly meet the requirements of the problem or the course, shows a serious deficiency in the mastery of skills, and raises serious questions with respect to the ability to achieve future successes within the Program.

Studio Grade Profiles

	Conceptual Considerations	Methodology	Craftsmanship	Integrative skills
A	<p>New concepts are explored in original ways. Conceptual basis of project demonstrates clear grasp of complex issues (histories, social contexts, ecological issues). Project is fully developed.</p>	<p>Analysis demonstrates rigor and highly developed understanding of scope. Sophisticated and attentive design decision-making apparent throughout process. Logical, confident and iterative procedure generates design outputs that can be described and evaluated in terms of the process.</p>	<p>Clear connection between ideas and their investigation through careful manipulation of design representation and materials. Excellent craftsmanship displays thought and care. Clear demonstration of the importance of the artifact in design production. Attentiveness to the aesthetic of making.</p>	<p>New and complex issues are successfully integrated. Seamless integration of depiction and depicted. Comprehensive marshalling and conjoining of the physical, the conceptual and the representational.</p>
B	<p>Complex issues are adequately integrated. Project is well-developed and design outcomes show understanding of issues.</p>	<p>Process demonstrates adequate grasp of problems and issues. Clear use of iterative method. Source data employed throughout. Project process remains within the confines of the known.</p>	<p>Good quality work, with moderate appeal. Engagement with materiality of representation needs further work. Outputs would improve with greater attentiveness to quality of craft.</p>	<p>Design production shows real understanding of issues, problems, resources and process, but does not quite bring them all together in a unified articulation of design intent.</p>
C	<p>Project exhibits an inherent lack of conceptual engagement. The necessary components are gathered but are related and explored only superficially.</p>	<p>Clear and effective process never fully developed. Tentative and ill-defined methodology. Tendency to change from approach to approach without fully investigating any one method, suggesting uncertainty with respect to iterative procedures.</p>	<p>Crafted dimension of production distracts from design intent. Sloppy, ill-managed articulation of the artifact as an object. Ideas remain untransformed by the act of making.</p>	<p>Project remains on the level of a collection of disparate ideas and forms, weakly integrated or developed, and only marginally related to the singularity of the site, situation or program.</p>
D	<p>Project is inadequately developed in all areas. Heavy reliance on found materials. Project shows little or no regulation by means of conceptual thinking.</p>	<p>Inadequate development of project. Muddled thinking about process. Little or no clear methodological procedure utilized. No connection between design output and design process.</p>	<p>Poor quality or negligible craftsmanship. No sense of the development of an aesthetic. Outputs are uninspiring, timid and uncared for.</p>	<p>Little or no sense of the project as an interactive condition. Outcome does not relate to program, site or contexts. Failure of understanding with respect to the nature of design.</p>

Accommodations based upon sexual assault

The University is committed to offering reasonable academic accommodations to students who are victims of sexual assault. Students are eligible for accommodation regardless of whether they seek criminal or disciplinary action. Depending on the specific nature of the allegation, such measures may include but are not limited to: implementation of a no-contact order, course/classroom assignment changes, and other academic support services and accommodations. If you need to request such accommodations, please direct your request to Kim Webb (kim_webb@wustl.edu), Director of the Relationship and Sexual Violence Prevention Center. Ms. Webb is a confidential resource; however, requests for accommodations will be shared with the appropriate University administration and faculty. The University will maintain as confidential any accommodations or protective measures provided to an individual student so long as it does not impair the ability to provide such measures.

If a student comes to me to discuss or disclose an instance of sexual assault, sex discrimination, sexual harassment, dating violence, domestic violence or stalking, or if I otherwise observe or become aware of such an allegation, I will keep the information as private as I can, but as a faculty member of Washington University, I am required to immediately report it to my Department Chair or Dean or directly to Ms. Jessica Kennedy, the University's Title IX Coordinator. If you would like to speak with the Title IX Coordinator directly, Ms. Kennedy can be reached at (314) 935-3118 jwkennedy@wustl.edu, or by visiting her office in the Women's Building. Additionally, you can report incidents or complaints to Tamara King, Associate Dean for Students and Director of Student Conduct, or by contacting WUPD at [\(314\) 935-5555](tel:314-935-5555) or your local law enforcement agency.

You can also speak confidentially and learn more about available resources at the Relationship and Sexual Violence Prevention Center by calling [\(314\) 935-8761](tel:314-935-8761) or visiting the 4th floor of Seigle Hall.

Bias Reporting

The University has a process through which students, faculty, staff and community members who have experienced or witnessed incidents of bias, prejudice or discrimination against a student can report their experiences to the University's Bias Report and Support System (BRSS) team. See: brss.wustl.edu

Mental Health

Mental Health Services' professional staff members work with students to resolve personal and interpersonal difficulties, many of which can affect the academic experience. These include conflicts with or worry about friends or family, concerns about eating or drinking patterns, and feelings of anxiety and depression. See: shs.wustl.edu/MentalHealth

Schedule

		Monday	Wednesday	Friday
1	Jan 18-22	MLK Holiday	Studio Option Presentations	Classes Commence Introduction to Exercise one - regional
2	Jan 25-29	Gather and draw	Present Exercise one Introduction to Exercise two. Guest speaker	Research
3	Feb 1-5	Collate and interrogate	Collate and interrogate	SITE VISIT
4	Feb 8-12	Present Exercise two Introduction to Exercise three	Amend with reference to visit	Research & build
5	Feb 15-19	Build	Present exercise three Introduction to exercise four	Develop iteration one
6	Feb 22-26	Desk crits	Desk crits	Show and tell
7	Feb 29-Mar 4	Desk crits	Desk crits	Show and tell
8	Mar 7-11	Mid-term review this week (TBA)		Reflection and forward planning
S P R I N G B R E A K M a r c h 1 3 - 1 9				
9	Mar 21-25	SITE VISIT (TBC)	Detailed sections	Show and tell
10	Mar 28-Apr 1	First re-arrangement Connections	Continue drawing	Show and tell
11	Apr 4-8	Projection 1	Projection 1	Projection 1
12	Apr 11-15	Show and tell	Second iteration	Develop second iteration
13	Apr 18-22	Single detail	Single detail	Preparation for final review
14	Apr 25-29	Preparation for final review	Draft work printed for review	Last Day of Classes 29 April Editing and revision
15	May 2-6	Final Review Week		

schedule and syllabus CHANGES

While every effort has been made by the instructor to present a timeline of studio, this schedule is subject to change. As the course develops, the schedule may need to be altered to accommodate natural but unexpected fluctuations. The instructor reserves the right to change the schedule. Similarly, the instructor reserves the right to alter and reissue this syllabus during the semester.