Course Description
Contemporary challenges posed by urbanization, climate dynamics, evolving economies and social paradigms have changed the demands we place on the designed landscape. Landscape architects in North America and around the world have risen to this challenge, revealing new possibilities for the economic, social and environmental performance of landscapes in public, private and infrastructural territories. This course examines the historical contexts and emergent theory driving this shift in the practice of landscape architecture, and uses contemporary projects as a basis for understanding multi-scalar design approaches, technical details and maintenance regimes. An emphasis will be placed on built landscapes and living systems as integral parts of site stormwater management approaches and regional water resource infrastructure.

Intended Learning Outcomes
- To understand the arc of design practice and theory as it relates to concepts of nature, mankind’s relationship with nature, and the role of natural systems in contemporary urbanism
- To understand the implications of operative landscapes, landscape performance for the contemporary practice of landscape architecture
- To be aware of exemplary, contemporary projects and design practices (offices, practitioners) demonstrating operative landscape principles, territories of application, proficiencies, and setting trajectories for the future of the profession
- To understand biological, botanical and ecological processes and principles fundamental to operative landscapes
- To demonstrate proficiency in developing landscape performance assessment strategies, researching eco-technology processes, and communicating landscape operations in visual formats
- To be prepared to advocate for sustainable planning and design strategies, operative landscapes in academic and professional work using quantitative metrics and the lexicon of living systems

Course Organization
In order to achieve these learning outcomes, the course is organized into three complimentary units:

Unit 1: Landscape Performance Theory – This unit traces the arc of landscape design history and landscape architectural theory relative to concepts of nature, anthropogenic relationships with the landscape, and the evolution of the meaning and motivation driving landscape design. Class discussions and lectures reinforce concepts first introduced through required readings.

Unit 2: Implications for Professional Practice – Once a theoretical understanding of the discipline’s transition from horticultural and aesthetic traditions towards high-performance public works practice has been established, major themes for how such a shift is impacting the professional practice of landscape architecture are identified and discussed. These implications include novel territories for practice, the science of landscapes and landscape architecture as science, contemporary criteria for plants in design, maintenance as design, the performance of appearance, visualization strategies, and the emergence of performance metrics. These themes serve as lenses through which project case studies are presented in the following unit.

Unit 3: Performance Themes – The balance of the class is dedicated to exploring landscape performance themes across economic, social and environmental agendas. Performance themes include RE (restore, regenerate, reclaim, remediate), economic stimulation, social catalyst, public health, and water resource stewardship. There is an emphasis in this unit on operative landscapes that avoid, minimize and manage stormwater, and contemporary flooding management approaches. This unit concludes with an exploration of the synthetic, comprehensive deployment of operative landscapes for community (re)building.
Fundamental concepts, language and living systems science pertinent to each theme are also introduced, and seminal projects that demonstrate the application of these themes are presented for discussion. Though projects are selected for their alignment with a primary performance theme, their complimentary economic, social, and/or environmental benefits are also discussed.

Site visits, lecturers by guests with expertise in knowledge areas related to performance themes, and in-person or remote conversations with practitioners may also be integrated into Unit 3.

Required Reading
Required readings will be assigned by the instructor each class as determined appropriate. Readings will be shared by way of a course DropBox. The course reading list includes, but will not be limited to:


Select chapters from the following will also be assigned.


Assessment + Grading
Assessment of a student’s individual performance will be based evaluation of the following:

- Attendance: students are expected to attend every class period. Students may have one absence from class without penalty. Following the first absence, each subsequent absence will affect a student’s final grade. Students are encouraged to contact the instructor prior to or immediately after the missed class and are responsible for the missed lecture content. Individuals with an observed pattern of regular tardiness or absence will meet with the instructor to determine whether they should continue in the course.
- Participation: Active participation during in-class discussions, demonstrating completion and comprehension of assigned readings. If it is determined by the instructor that a pattern of not completing required readings persists, pop quizzes or exams may be incorporated into the course’s evaluation approach.
- Discussion Reflections (blog posts): Required reflection prompts will be tendered by the instructor periodically. Students will post written 200-300 word reflections to a personal blog, the address for which will be shared with the instructor at the beginning of the semester.
- Projects: Three graded projects will be assigned over the course of the semester
  - Two individual projects, submitted
  - One group project, presented/juried

‘A’ - Outstanding: This student displays a mastery of the subject matter. All required work is complete and demonstrates a superior understanding of the issues and skills involved in the project and applies them appropriately. The individual consistently demonstrates initiative and inquiry and goes above and beyond instructor expectations. Assignment materials are superior in content and craftsmanship and communicates information clearly. The individual consistently participates and is actively engaged in the class.

‘B’ - Good: The quality of the student’s work and participation is above average, but lacks the thorough rigor of excellent work.

‘C’ - Average: The quality of the study’s work and participation work does not exceed expectations. The work is satisfactory, but does not display a mastery of the subject matter.

‘D’ - Poor: The basic expectations of each student have not been met. The work has obvious shortcomings. There is little effort put forth in the class, and no mastery of subject matter.

‘F’ - Failing: Almost no effort has been put forth by the student demonstrated by both process and product.
LAR 525 – Operative Landscapes  
Fall 2016 Course Schedule

The following schedule is subject to change at the discretion of the instructor. Lectures and assigned readings will be incorporated as determined appropriate:

Week 1: W, August 17: Introductions, Course Overview and Infrastructures
Week 2: M, August 22: Ideas of Nature, Wilderness (Project 1 Assigned)  
W, August 24: Meanings of the Designed Landscape
Week 3: M, August 29: Towards Landscape Urbanism: Grand Challenges and a Call for Operative Landscapes  
W, August 31: Operative Landscapes and Infrastructure Practice
Week 4: M, September 5: LABOR DAY – No Class  
W, September 7: Operations & Professional Practice I (Project 1 Due, Project 2 Assigned)
Week 5: M, September 12: Operations & Professional Practice II  
W, September 14: Remediate, Regenerate, Restore I
Week 6: M, September 19: Remediate, Regenerate, Restore II  
W, September 21: Remediate, Regenerate, Restore III
Week 7: M, September 26: Regenerate, Restore IV (Project 2 Due, Project 3 Assigned)  
W, September 28: Stimulate – Economic Activity
Week 8: M, October 3: Social Vibrancy  
W, October 5: Design for Health
Week 9: M, October 10: Water Resources Introduction  
W, October 12: Green Infrastructure Fundamentals
Week 10: M, October 17: Runoff Volume Reduction I  
W, October 19: Runoff Volume Reduction II
Week 11: M, October 24: ASLA NATIONAL MEETING – No Class  
W, October 26: Runoff Volume Reduction III  
R, October 27: RESEARCH REPRESENTATION WORKSHOP (Afternoon)  
F, October 28: RESEARCH REPRESENTATION WORKSHOP (All day)
Week 12: M, October 31: Runoff Volume Reduction IV  
W, November 2: Biological Stormwater Treatment I
Week 13: M, November 7: Biological Stormwater Treatment II  
W, November 9: Biological Stormwater Treatment III
Week 14: M, November 14: Biological Stormwater Treatment IV  
W, November 16: Flood Management I
Week 15: M, November 21: Flood Management II  
W, November 23: Flood Management III
Week 16: M, November 28: Synthesis: Building Communities through Operative Landscapes  
W, December 1: Synthesis: Building Communities through Operative Landscapes

Exam Week: 800-1000AM, M, December 5 or W, December 7 – Project 3 Presentation