Rutgers Landscape Architecture

16:550:533 Geodesign Studio 2021
Human health shaped by the landscapes of Monmouth County

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Lecture: Tuesday 1 PM - 2:20 PM  BL-149
Studio: Tuesday 3 PM – 6 PM  BL-149
Studio: Thursday 3 PM – 6 PM  BL-149
Common Lecture: Wednesday 5 PM – 6:20
Office Hours: Thursday, 11-12 noon, Blake 220 (or online)
Office Hours: Tuesday, 11-12 noon, Waller Hall (or online)
(Other days/times by appointment or just dropping in)
Learning Goals

Goal 1: Students will be able to analyze ecological and other landscape processes in order to substantively inform their design decisions.

Goal 2: Students will be able to craft designs at the regional scale that facilitate or enable desired ecological and social scenarios at multiple scales.

Goal 3: Students will understand and apply policies and planning recommendations that regulate the use and design of the landscape in order to develop more sustainable and implementable designs.

Goal 4: Students will be able to effectively communicate their designs and design principles.

Health as a community issue

Geohealth is a major issue in Central New Jersey and around the world. The world has become increasingly urban and GIS as a tool and science is an unprecedented innovation that can help us understand how these cities impact the health of their residents. Consider the evidence we’ve seen in the global pandemic during which countless users have made use of online mapping tools portraying COVID infections, deaths and vaccinations across a variety of scales and with variable data quality. But COVID is just one health concern.

And the maps prove a simple notion: where we live shapes our health. “People living just a few blocks apart may have vastly different opportunities to live a long life in part because of their neighborhood.” (RWJF) It might not be fair, but the reality is that our health is shaped by our community and where we live.

Today more than half of the planet’s residents live in cities. According to the UN (in 2018) there are already 33 cities with over 10 million residents. To house the growing population some cities are being built so quickly as to be called Instant Cities. Even in the US, where citizens often went to Disneyland if they wanted to enjoy urban living, cities have made a remarkable recovery. But today even young Americans are embracing urban life as the newest generation of adults, Millenials, are moving back into cities rather than buying suburban homes.

But cities can be home to some troubling health trends and concerns. Living in close quarters comes at a cost. The fear that swept the country about catching ebola on the subway was evidence of the concerns, regardless of whether they are well founded. Refusal to avoid exposure to danger or an unwillingness to be treated can threaten entire communities. Asthma is a global urban epidemic. Here in the US Asthma affects 21 million Americans, including nearly 9 million children.

Nationwide, 1/3 of all children born in the US after 2000 will have diabetes. In the US, minority neighborhoods in cities have particularly high rates of childhood obesity. Limited healthy food offerings
in many neighborhoods make chips more accessible than produce. American auto manufacturers have started using a second crash test dummy. Today, obesity is our biggest killer.

This semester we will explore how design can shape a community in ways that impact the health of its residents. Our studies will include looking at literature and design precedence, and then apply lessons from those materials to neighborhood and regional landscapes here in Central New Jersey.

By the end of the semester we will be thinking regionally and locally simultaneously. Science will inform in defensible design decisions throughout the process. And GIS will be a key tool to make those happen.

**PROCESS**

Watching creative people work, inventiveness and spontaneity seem like celebrated qualities. But if you visit the artists at Mason Gross or look at the documentation for a show at MoMA, you will discover that rational processes and thorough justifications are critically important foundations for their creative work. That rationality and defensibility of ideas is going to be central to our regional exploration of design.

With that in mind, thinking and acting regionally is tough. But it helps if we can build on the backs of giants. Carl Steinitz has proposed an iterative model that requires thinking through a landscape change at least 3 times:
An important theme of the semester is finding a process that we can use to guide our work. While we might need to make changes to existing models, our job is easier if we can trust in the past work of leaders in regional design. Two models that we will investigate are Steiner’s model (below) for ecological design and the framework model for landscape change by Steinitz (above).

![Diagram of design process]

**Working systematically:**

*Phase I: Exploring the site and the topic* – The project will begin with a rapid familiarization with the site: all of Monmouth County. This will require site visits, reading reports and papers, talking with experts, and lots of data and maps. It will also include a rapid process of learning about public health and related issues. This phase will conclude with a presentation where the class explains how they see the site and the problems that we are attempting to address.

*Phase II: Analysis* – One of the things that sets the class apart is its access to science (especially here at SEBS) and access to geospatial technologies. Leveraging those strengths, we will seek to analyze the landscape, analyze the problem, and analyze our potential solutions. Making sense of the data and information we accumulate will require substantial synthesis. As you learned in research methods, analysis and modeling will help reveal patterns than can inform our design approach.

*Phase III: Design* – The design process will connect directly with the problems and data from the first phase and building on the new knowledge generated during the second phase. It will leverage local design solutions as part of a larger plan. The regional plan will present a comprehensive approach while the local solutions will represent a flexible toolkit.
Phase IIIa: Production – To ensure professional materials, the schedule includes a period dedicated to the production of communication materials that can have a lasting impact.

Academic Integrity Policy and Copyright:

It is expected that you give proper credit to all sources (text and image) quoted in every drawing or text. That includes the use of photography taken by others.

Rutgers has an academic integrity policy that emphasizes the importance of staying beyond reproach. You should never take inappropriate credit for the work of others, either your classmates, roommates, siblings, famous authors or obscure Internet sources. A huge percentage of academic integrity cases could simply be resolved by giving credit to the source of the data, idea or wording. (That is why quotation marks are so valuable)

Since some of the work in this class will almost certainly end up being published online or in print, your personal reputation and that of the program both depend on giving proper credit for the basis of any work. They also depend on not using photos, data, or other materials for which you do not have permission. Use of copyrighted materials on a publicly posted publication, without permission, is both a violation of the class rules and violation Federal and International law. Any project that is turned in that uses photography or images from outside sources without giving credit will be penalized.

If you ever have any question about whether something requires credit, please check with me. Once you turn in a problematic assignment, it can be very hard to undo the damage.

Disabilities: Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.

Work Becomes Department Property

Submitted drawings, models, photographs, or written papers for any project assigned in Landscape Architecture courses are considered the property of the Department and may be retained in its archives for exhibition and accreditation purposes.
All projects will be graded and returned to the student at a location designated by the instructor. Should your drawings be retained by the Department, you will be given the opportunity to obtain a print or photographic record of your work.

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**Use of Facilities**

Studio cannot be taught without reliable facilities. But your use of the facilities is dependent upon responsible use with particular regard to the clearly established rules about their use as specified in the student handbook:

http://landarch.rutgers.edu/current_students/student%20handbook/StudentHandbook_web_SectI.pdf

These rules cover access to studio and vandalism, table assignments, personalization of workspace, smoking and drinking, use of the lockers, access to the reference collection, and basic rules governing the use of the computer lab. Failure to observe rules may result in loss of access. Access to the fabrication lab is granted after successfully passing the safety instructions. Access is monitored and can be revoked if students use tools they are not qualified for or if students do not clean after themselves.

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**Equipment**

We are encouraged to keep more doors open and promote air circulation in the windowless space we have been assigned. Students are encouraged to take heightened precautions for security. Use the locks on the drawers and don’t leave valuables out.

The student handbook also includes a section governing the use of equipment http://landarch.rutgers.edu/current_students/student%20handbook/StudentHandbook_web_SectII.pdf. This section includes rules specifying use department equipment including of projection equipment, department cameras, and drafting equipment.

Submitted drawings, models, photographs, or written papers for any project assigned in Landscape Architecture courses are considered the property of the Department. The formatting of all digital submission must follow the department guidelines because they will be retained in its archives for exhibition and accreditation purposes.

All projects will be graded and returned to the student at a location designated by the instructor. Should your drawings be retained by the Department, you will be given the opportunity to obtain a print or photographic record of your work. Department files are OFF LIMITS to students.

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**Attendance:**

Studio attendance is mandatory. The Department of Landscape Architecture requires attendance in all of its classes. The individual student’s development as a landscape architect is largely dependent upon
two aspects of education. First is the exposure to and assimilation of a body of information which relates to the field. Second is the application of this knowledge through studio projects and problem-solving skills developed through critiques, reviews and interactions during each project.

The Rutgers Landscape Architecture curriculum is designed to develop both areas. Attendance and participation in all lectures and studios are essential if the student is to achieve his/her maximum potential. Unless a more strict policy is in place by the individual instructor, more than three unexcused absences will result in a step reduction in your semester grade. Each additional three absences will result in another step reduction. Since the common lecture is part of the studio, missing that would count as an additional absence.

A minimum level of participation is defined as being in attendance for the entire duration of a class session. It is the student’s responsibility to be in attendance at all required classes and all personal plans should be made in accordance with the schedule. Your attendance at juries or special seminars scheduled in your design course is mandatory for the entire duration of the session.

Tardiness is absence. If class starts at 3, it does not mean that 3:15 is close enough. Since Common Lecture is part of studio, we really meet 4 times a week – that means that skipping a week of school is sufficient cause for lowering a grade. Rutgers does not count extended family vacations, work (which pays for school), lunch, or the Tuesday before Thanksgiving as excused absences.

**Studio Expectations:** Studio time is very limited, so you are expected to be here for the whole thing unless we are working in the field or doing library work, etc.

**Keeping Up is Key.** As we teach you new skills/techniques, we expect you to know them and be able to use them. A GIS lab today might lead to a GIS project on Friday. If you fall behind, you will drag down others.

**Be Prepared.** Bring your laptop* and have your drawing equipment at the ready. I like surprise drawing or rapid research projects.

**Time is precious.** When we suggest that your team should look into something, we don’t mean that you should wait a few weeks until we tell you who to call. We mean that you should immediately send emails, make calls, drive to that county’s library, or ask us exactly who to contact.

**Time is precious.** In order to squeeze in as much information about regional analysis and design as possible, we are going to move fast. That means that when we go TOO fast, you have to be willing to let us know, and you sometimes you may have to be willing to do a little extra work to keep up.

**Stay until the end!** 10 minutes before studio ends is a great time for wrap up or reassessment...unless you’ve already left. In which case it is a great time for the world’s easiest pop-quiz.

**Reviews are Special.** As new design students, just getting something done in time for a review was a challenge. You probably faced the review with dread and hoped no one caught (or mentioned) all of your shortcuts and problems. Now, as more advanced design students, we want to encourage you to
look forward to design reviews and pin-ups. These are unique opportunities for you to grow as a designer, and you should really work towards them as a moment of triumph. We encourage you to come in with work that you simply can’t imagine improving on. Think to yourself, “I dare you to find something wrong with this design.” And then savor the moment when the critics point out things that you didn’t think of. Don’t bother saying, “But, they told us that wasn’t part of the problem” or “We haven’t covered that yet.” Just spend every minute of the review trying to learn as much as you can about what you didn’t see before and milk any visitors for every ounce of information and advice.

**Deadlines Matter:** I want you to learn about how to make good decisions when time is limited. So, we are strictly enforcing deadlines. Late projects and assignments will be docked, generally 10%, when turned in late. An hour late is late.

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**LOGISTICS**

**Tentative key dates:**

- **TBD**  Site visit – all afternoon
- **10/7**  Present an Encapsulation of Problem and Place
- **11/7**  Presentation of Analyses and Intentions for final plans
  - (11/19-22 ASLA)
- **12/7**  Final Presentations at Blake Hall
- **TBD**  Final Presentation in Monmouth County - Final Report Due (Date subject to change)

As we are working with a real client, some of these dates may need to be adjusted. Thank you in advance for that flexibility.

**Flexibility:**

For this studio to succeed through various storms, cyberattacks, organizational change and pandemics, flexibility will be necessary. This applies to technology and scheduling as well as other solutions. As 3rd year graduate students, I prefer to respect your ability to think creatively about the flow of the project. That might mean changing the number of small projects or shifting the grading emphasis to reflect an altered path. Also, since the regional work benefits greatly from group contributions, we will all benefit if you are able to anticipate (and propose) flexible approaches as part of the class structure. Finally, there may be days when the best learning is going to happen through switching to Zoom or splitting the class into different platforms.

**Assignments and Grades:**

This studio will employ a wild variety of techniques for evaluating your work and assimilation of the material. Since we’ve never done this project before, I have to ask you to be flexible as we adjust the schedule and grading to fit both the work and the learning.
These techniques may include (but not be limited to): Lab assignments, Preliminary studio projects, Final studio projects, and Quizzes and pop quizzes.

Because we don’t know how the semester will flow, it is hard to say precisely what the final grade will look like. But, it should end up something like this:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussions, assignments, quizzes, pop quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>First design project</td>
<td>10%</td>
</tr>
<tr>
<td>Second design project</td>
<td>20%</td>
</tr>
<tr>
<td>Preliminary designs – final project</td>
<td>10%</td>
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<tr>
<td>Spatial analysis – final project</td>
<td>10%</td>
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<tr>
<td>Final designs and presentation materials – final project</td>
<td>20%</td>
</tr>
<tr>
<td>Final presentation and in-class exercises about public speaking</td>
<td>5%</td>
</tr>
<tr>
<td>Final report – final project</td>
<td>10%</td>
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</tbody>
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**Due Dates**

Except for circumstances truly beyond the student’s control, all assignments are due at the dates and times specified throughout the semester. Projects that are incomplete on the due date should still be submitted on the date it is due to receive at least partial credit. Any work submitted late will be penalized a letter grade for each day past due. Working beyond a due date is both unrealistic in a professional setting and unfair to your classmates in this course.

**Common Lecture**

The class includes a learning objective that is about improving public speaking skills. The Common Lecture gives us an outstanding opportunity to evaluate public speaking and talk about what works and what doesn’t. Admittedly, the online format is going to alter this, but Zoom has also become another format that we all need to conquer.

After each Common Lecture, a lead student will post a short commentary on the public speaking aspects of the talk (trying to be done by 11am on Thursday) and every student will try to make a comment by class time. We don’t need to know much about the content of the talk, but instead will be talking about the seemingly superficial presentation techniques and decisions. It is worth asking whether maybe the great content was undermined by mumbling and poor images. Or, whether some vapid projects overexcited the audience because the speaker started with an incredible joke and finished with an exceptional 3d fly-through. But as we go on, we’ll get more detailed in how we look at the presentations too.

September 15: Johann Rinkens & Lindsay Napolitano  Lead Student: Henry

September 22: Nate Heavers  Lead Student: Brittin
September 29: Dan Handel  
Lead Student: Diana

October 6: Jason Nguyen  
Lead Student: Chris

October 13: Gina Ford  
Lead Student: Brittin

October 20: Warren Byrd  
Lead Student: Henry

October 27: Daniel Barone  
Lead Student: Chris

November 3: M. Elen Deming  
Lead Student: Diana

November 10: Teddy Cruz & Fonna Forman  
Lead Student: Henry and Diana

November 17: Kristi Ceramie Landscape Dilemmas  
Lead Student: Brittin and Chris