NYU | Gallatin School of Individualized Study
FALL 2015 ARTS-UG1619: Architecture and Urban Design Lab I

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TIME: MONDAY, 12:30 AM – 3:15 PM, and LAB 3:30 PM – 4:45 PM
UNITS: 6.0
ROOM: 432, Arts Studio Space

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Office RM. 617, meetings by appointment

TA: TBA

Course Description
This workshop and design lab aims to impart skills and theories essential to intelligent green design and socio-ecological practice applicable to all materials, buildings, and infrastructure systems. The course will look broadly at types of inhabitation, including hives, webs, nests, and lodges; houses, housing, cities, and regions; and extreme environments including emergency shelters and outer-space habitats. Our objectives are grounded in understanding the architectural consequences of socially responsible and community based endeavors in urban areas. As a project-based course, students will work individually and in teams and will combine original research with design proposals. Early design exercises in the beginning of the semester will prepare students for an intense focus on a current problem facing New York City. Students will be expected to present their ideas in mock-ups, scaled models, schematics, lifestyle drawings, and other forms of imaging. Thus, as they create and develop their own original design proposals, students will experiment with a variety of techniques and forms of representation. Authors may include William J. Mitchell, Mohsen Mostafavi, Alex Krieger, Elizabeth Diller, Michelle Addington, William McDonough, Ricky Burdett, Sanford Kwinter, Ernst Haeckl, James Corner, Victor Papanek, Stan Allen, Charles Waldheim and others.

Course Objectives
The purpose of this course is for the student to improve their understanding of the sensibilities and causal theories that support bio design and architecture. A profound emphasis on the intersections of science, media and space will be explored and researched. Students will increase their knowledge within the conventional practice of architecture, environmental planning, synthetic biology, and urban design. We will collectively seek to comprehend large-scale and local ecosystem issues and dynamically provide novel solution spaces. We will emphasize improved communication skills in various visual formats.

Readings/ Works (*** indicates required text)


**Workshop**
The course will work through a variety of scales and a series of bio-based projects. Analysis, rigor, and engagement with current issues are priorities for this studio. Work will be reviewed and discussed in a group format, through one-on-one meetings with the professors, and in more formal presentations.

Designed to encourage dialogue, collaboration, risk-taking, innovation, and learning-by-doing, this studio offers an environment where students can come together in an open frame of inquiry. Questions and proposals will be developed and discussed among classmates, faculty, visiting professors, scientists and the public-at-large. Each student is expected to develop his/her critical thinking skills and spatial and material sensibilities. This studio is parallel to an architecture practice where there may be no "right" answers. A formal knowledge of biology/ ecology is not required.

**Teaching Assistant** is joining this course as an additional instructor to direct the Monday laboratory sessions and to offer tutorials during the class periods.

**Attendance**
Attendance and punctual arrival in class is expected; students are expected to stay for the entire class period. Religious holy days sometimes conflict with class and project schedules. If you miss a class or work assignment due to the observance of a religious holy day, you will be given an opportunity to complete the work within one week after the absence. Please contact us before class if you expect to miss class for a religious holy day.

**Required Software**
In lieu of textbook purchases for this class, you will be expected to use the Adobe Suite of programs. Since we will be going over certain computer exercises and functions in class, you are expected to bring your laptop to class to follow along with exercises or instructional demonstrations.

If you would like to purchase the Adobe CS5 creative suite, it is available at the NYU computer store for purchase for ~$210, a significantly reduced price available only for students. Adobe CS5 includes full versions of Photoshop, Illustrator, InDesign and Adobe Acrobat, which will be tools for this course.

The Adobe suite can also be downloaded through NYU. If you plan to download the programs, please do so well in advance of the first class in case there are glitches. You can find the Adobe Creative Suite (CS5) Design Standard Edition at the NYU Virtual Computer Lab site. The link is [http://vcl.nyu.edu/](http://vcl.nyu.edu/) but students must sign up first from within [home.nyu.edu](http://home.nyu.edu). The link to sign up is on the bottom left of the NYU Home page. Additionally, below is a link to the NYU computer labs with information about the various software and
hardware items available at each site:
http://www.nyu.edu/its/labs/software.html

Assignments
There will be three early exercises to foster skill building and design acuity. Each exercise will be approximately one week long and graded 1-5 points. Together they will make 40% of your total grade. In class they will be reviewed and the next assignment described in detail. Therefore it's important not to miss a presentation.

Course Grading Guide
Establishing grades for projects of a creative nature is a more complex matter than grading in other academic areas. While each project contains certain quantifiable elements by which it may be evaluated, a significant portion of each grade is derived from a broader, more subjective set of issues.

Final Project: 50%, Three exercises 1-5 each Total: 40%, Attendance and Participation: 10%. Grading for this course is broken into five components for each given mark:

1/5 grasp (understanding the ideas and issues of the project at hand, combined with an appropriate process of inquiry);

1/5 process (the consistent and rigorous development and testing of ideas)

1/5 participation (contribution of ideas, questions)

1/5 resolution (the demonstration of competence, completeness, and finesse through representation).

1/5 effort (genuine work applied)

Grade Descriptions
A/A- : excellent
Work surpasses expectations in terms of inventiveness, appropriateness, conceptual rigor, craft, and personal development. Student pursues research, concepts, and techniques above and beyond what is discussed in class.

B+/B/B- : above average
Work is thorough, well researched, diligently pursued, and successfully executed. Student pursues ideas and suggestions presented in class and puts in sustained effort to resolve projects. Demonstrates potential for excellence.

C+/C/C- : average
Work meets the minimum requirements. Suggestions made in class are not pursued with dedication or rigor.

D+/D/D- : below average
Basic skills including writing, research, graphic skills, verbal clarity or logic of presentation are not level-appropriate. Student does not demonstrate the required skill set and knowledge base.

F : failure
Minimum objectives are not met. Performance is not acceptable. Note that this grade will be assigned with excessive unexcused absences.

Statement on Academic Integrity
As a Gallatin student you belong to an interdisciplinary community of artists and scholars who value honest and open intellectual inquiry. This relationship depends on mutual respect, responsibility, and integrity. Failure to uphold these values will be subject to severe sanction, which may include dismissal from the University. Examples of behaviors that compromise the academic integrity of the Gallatin School include plagiarism, illicit collaboration, doubling or recycling coursework, and cheating. Please consult the Gallatin Bulletin or Gallatin website www.gallatin.nyu.edu/academics/policies/policy/integrity.html for a full description of the academic integrity policy.

Academic integrity demands that all work you submit is your own. You are required to credit any sources that have contributed to the development of your ideas. Presenting ideas, words and images as your own without acknowledging their source is plagiarism, a type of academic fraud.

Plagiarism includes, but is not limited to:
- Using a phrase, sentence, passage, image, or any other type of creative or intellectual material from another work without proper citation.
- Paraphrasing words or ideas from another work without attribution.
- Reporting as your own research or knowledge any data or idea gathered, reported, or developed by another person.
- Submitting as your own work anything produced by another.
- Purchasing or downloading work and submitting it as your own.

FIRST PROJECT
Bio Form – Repeated material

Find an existing inexpensive utilitarian object of your choice. Purchase 20-40 of these identical items. Make sure the material and shape is easy to separate and/or cut into usable modules. Examples; plastic spoons, coffee cup lids, hangers, water bottles, toys, hardware components, electronic units, disposable items, and etc. After an object is chosen make a series of strategic decisions to unpack its parts into a series of reduced tectonic elements. After this stage you are required to reassemble these same elements into a new formal composition representative of biological system. The goal is to reveal an unseen structure that mimics a self-organized pattern(s) commonly found in nature by using this single repeated manufactured object. Each component should be methodically scaled, rotated, and moved to reconstitute a novel physical assemblage. The final outcome could resemble a microscopic parasite, undersea coral, mammalian spinal cord, insect thorax, or any recombinant biological structure. This exercise will be a kind of classic visual test of Gestalt theory, where the sum is greater than its parts. Samples of previous work by other students will be shown in class.
### COURSE SCHEDULE*

<table>
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<tr>
<th>Date</th>
<th>Activity Details</th>
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<tbody>
<tr>
<td>9/14</td>
<td>Issue Project 1 Bio Form Repeated Material</td>
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| 9/21  | Review Project 1  
Issue Project 2 Diachronic Drawing |
| 9/28  | Site Visit I |
| 10/5  | Guest Talk - Review Project 2  
Issue Project 3 Volume Grid |
| 10/12 | FALL RECESS NO CLASS |
| 10/13 | Review Project 3 (Legislative Day) |
| 10/19 | Urban/Bio Lecture and Site Visit II |
| 10/26 | Assemble Team/ Lab Schedule |
| 11/2  | Urban/ Bio Models due |
| 10/9  | Mid-Review -- Rework Refine Period |
| 11/16 | Mid-Review II |
| 11/23 | Final Preparation |
| 11/30 | Optional – Thanksgiving Break |
| 12/7  | Critiques and Workday |
| 12/14 | Final Presentation |
| 12/**|--** | Optional Day TBA |

*All dates are subject to change based on information / opportunities that might arise during the semester.