ARC 451a: Urban Form, S2014
Instructor: Susannah Dickinson

SoA, CAPLA
University of Arizona

COURSE DATA
ARC 451a, Section_003 Urban Form
Spring 2014
6 credit units

FACULTY:
Susannah Dickinson, RA. Assistant Professor.
srd@email.arizona.edu
CALA West Rm. 306, office hours as needed.

CRITERIA
Fulfillment: This course is an undergraduate options studio.
Pre-requisites: Passing grade in arc 401 and the Milestone 2.0
Contact: Required meeting times are Monday, Wednesday and Friday 1:00 – 4:50 pm or as listed in the schedule. Field trips will be a part of the course pedagogy. Every effort will be made to schedule field trips during studio time. Longer trips may need to be scheduled outside of regular class times. Students are strongly encouraged to participate and every effort will be made to make these as financially feasible as possible. In the event that a student is unable to participate in a field trip, alternative assignments will be given.
Web + d2l: Course material will be available at the course d2l site (http://d2l.arizona.edu)
Costs: There are no fees directly related to the instruction of this course aside from the standard tuition established by the College and University. Course materials (such as modeling materials and printing) and field trips will present additional, discretionary costs and are the responsibility of each individual student. Efforts will be made to keep all of these to a minimum.

CATALOG DESCRIPTION
Undergraduate level options design studio.

COURSE DESCRIPTION + OBJECTIVES
“Cities are the largest, most complex, and most dynamic human-made systems. They are vibrant centers of cultural life and engines that drive the global economy. Contemporary cities are environmentally, socially, and economically unsustainable. The quality of urban life is threatened by such factors as pollution, rising temperatures, limited resources, congestion, social inequalities, aging of large sectors of the world population, poverty, informality, crime, and economic imbalances.”

eCAADe 2010 Conference, Future Cities, ETH, Switzerland

“Landscape is typically viewed as the soothing antithesis to the placeless frenzy of technological urban life; few would share the view that the contemporary metropolis can be construed as a landscape.”

James Corner, Recovering Landscape, 1999.
The studio will study emerging directions for future cities and the relationship between the urban and landscape. Landscape is generally no longer the idealized pastoral scenery outside the city walls, although pressure to densify the urban and protect ‘nature’ assumes this ideal. The studio will research current approaches to new sustainable cities, evaluating the relationship that the natural and the built environment should have to each other; should we continue with this binary dualism of the built and the natural rather than being more mutually inclusive in a world where we are realizing the inter connectivity of life? In the struggle to make our cities more sustainable they need to become better functioning ecologies. Jane Jacobs in her landmark book of the sixties, *Death and Life of the Great American Cities*, conveyed an image of the city as a vital organism, alive like nature, capable of adaptive change.

The intent of the studio is to find ways of form-finding verses form-making; using natural and built infrastructure, systems and flows to create new planning strategies, relationships and building typologies; speculating on how much should be designed/controlled in this more dynamic model for humans and the environment (bottom-up versus top-down approaches). The stance is that it is not OK to maintain the status quo, but that we need to fundamentally rethink the direction we are moving in. Note that sustainability should always be a factor in all design processes today, realizing this is at least tri-fold; environmental, social and economic.

Emphasis will be placed on research as a speculative and iterative process rather than on final products. Digital Technology holds a fundamental role in this rapidly changing information age; various digital platforms and their interoperability will be explored to accommodate the most effective work-flows e.g. parametric design, simulation software, BIM and GIS.

“Design today must find ways to approximate these ecological forces and structures, to tap, approximate, borrow, and transform morphogenetic processes from all aspects of wild nature, to invent artificial means of creating living artificial environments. We must learn to see design algorithms everywhere we look. In time, we will earn the right to call ourselves urbanists again.”

Sanford Kwinter, *Far From Equilibrium*, 2008

**NAAB PERFORMANCE CRITERIA**

None for this course

**COURSE COMPONENTS + CRITERIA OF EVALUATION**

**Project:**
This course requires timely completion of well-considered assignments, including active participation in studio activities, informal and formal reviews, group discussions, readings, lectures and field trips. Please see the Director’s policy on Studio Culture. A design will be achieved through the culmination of 4 assignments focused on the development of one project for the semester. Studio assignments will be distributed on the dates outlined in the course schedule of the syllabus. Requirements for each assignment will be listed at that time. Further, more informal pin-ups will be added as needed. The duration and topics of the assignments are as follows:

Assignment 1: General Research (2 weeks)
Assignment 2: Design Methodology Research (2 weeks)
Assignment 3: Schematic Design (4 weeks)
Assignment 4: Design Development (6 weeks)

**Grading weight**
The grading for each assignment will be derived through evaluation in at least three areas: clarity (techniques and conceptualization), development (showing an iterative process), and final presentation (execution) of the assignment. Please note that mid reviews for assignment 4 are to be taken seriously and will be factored into your grade.

Grading weights for the class are as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Assignment 1</td>
<td>10%</td>
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<tr>
<td>Assignment 2</td>
<td>10%</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>20%</td>
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<tr>
<td>Assignment 4</td>
<td>50%</td>
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<tr>
<td>Participation</td>
<td>10%</td>
</tr>
</tbody>
</table>

Total 100%
**SUGGESTED READING LIST**

**Main suggested readings will be digitally supplied as pdfs to d2l**


Corner, James. *Recovering Landscape*. New York: Princeton Architectural Press, 1999 (particularly the preface and Alex Wall article)


Verebes, Tom. Masterplanning the Adaptive City, New York: Routledge, 2014

Various editors. *Future City; experiment and utopia in architecture*. New York: Thames and Hudson, 2006


**Relevant Architectural Design Issues, AD**

*AD July/August 2009, “Digital Cities” edited by Neil Leach*

*AD November/December 2010, “Eco Redux” edited by Lydia Kallipoliti*

*AD November/December 2011, “Experimental Green Strategies” edited by Terri Peters*

*AD July/August 2013, “System City” edited by Michael Weinstock*

*AD May/June 2013, “The New Pastoralism” edited by Mark Titman*

**SUGGESTED VIDEO LIST/DIGITAL COPIES/LINKS**

Living Planet Report – Great resource for current statistics


John Frazer, *An Evolutionary Architecture* book digital copy

[http://www.aaschool.ac.uk/publications/ea/intro.html](http://www.aaschool.ac.uk/publications/ea/intro.html)

Michael Weinstock Lecture – Metabolism of Cities Lecture


Adaptive Ecologies Seminar, 2012 at the AA School of Architecture.


Graham Shane, *Urban Design Since 1945* Lecture


Biomimicry Lecture


Philip Ball – Embodied Patterns: Patterns in Nature... and Beyond Lecture

Santa Fe Institute (science for a complex world)
http://www.santafe.edu/education/
http://www.youtube.com/watch?v=yMHfrRs5JA&list=PLZ1VB77N6Go40JuwxWjJamYHvZPjdG7a

Iwan Baan’s ted talk
http://www.archdaily.com/tag/iwan-baan/

ACADIA website
http://acadia.org/

Competition
Keep a look out for other competitions during and after the semester, on Bustler e.g. d3 competition

SEMMESTER SCHEDULE
A course calendar is attached to this syllabus.

POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay.

INCOMPLETE WORK
Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion.

GRADING SCALE
Grades will be defined as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Criteria</th>
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<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence in most areas of evaluation, high competence in others.</td>
</tr>
<tr>
<td>B (80-89)</td>
<td>High competence in most areas of evaluation, competence in others.</td>
</tr>
<tr>
<td>C (70-79)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
</tr>
<tr>
<td>D (60-69)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
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<tr>
<td>E (0-59)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
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<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
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GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd unexcused absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence.

EXCEPTIONS
All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion in writing in advance of the event. Observances pre-approved by the UA Dean of Students will be honored, as listed at: http://www.registrar.arizona.edu/religiousholidays/calendar.htm

DOCUMENTATION STANDARDS
A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards, unless indicated differently by instructor:

**Project documentation**
Every sheet of every project will indicate:
- course number
- semester/year
- professor
- student author(s)
- current date of the work
- page or sequence number

**Drawing documentation**
Every drawing will indicate:
- drawing type (plan, section, elevation, perspective, axonometric, etc.)
- graphic scale
- orientation indicator (north arrow for plan; directional description for vertical projections (e.g., South Elevation; Perspective Looking North)
- reference indicators (section and elevation markers, blow-up references) that link the drawing to the relevant documents.

ARCHIVE DOCUMENTATION
All work produced in fulfillment of University requirements becomes the property of, and may be retained by, the School. Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:
ARC XXX_YYYYS_category_F.Name
where
ARC XXX is the course number, e.g., ARC 401;
YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
F.Name is the student’s first initial and last name.s

CLASSROOM BEHAVIOR + STUDIO CULTURE
The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.
All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings. Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES
Academic policies can be found in The University of Arizona General Academic Catalog: http://catalog.arizona.edu/allcats.html
For the principles, policies, and procedures governing issues of academic integrity, see: http://deanofstudents.arizona.edu/codeofacademicintegrity.

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1 A “DETAIL” is not a drawing type. Every drawing is a detail, considered from some perspective.
2 It is essential that all drawings have graphic scales, as notational scales are meaningless with digital documentation and dissemination.
PLAGIARISM
The practice of taking someone else's work or ideas and passing them off as one's own is known as plagiarism and is a serious violation of academic and professional ethics.

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, email, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to the intellectual property of professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material. Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the proper format specified in the *Chicago Manual of Style*. Citations of buildings and other designed works should include both a) project and b) source information:

project citation: the work's name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

source citation: the source from which the information or illustration of the work was obtained formatted according to the *Chicago Manual of Style*:
http://www.chicagomanualofstyle.org/tools_citationguide.html

This course follows the University of Arizona’s Policy on plagiarism:
http://deanofstudents.arizona.edu/codeofacademicintegrity

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

THREATENING BEHAVIOR
All participants must follow the University of Arizona’s Policy on student behavior:
http://deanofstudents.arizona.edu/sites/deanofstudents.arizona.edu/files/disruptive_threat_bklt_web_0.pdf

HANDICAPPED ACCESSIBILITY / DISABILITY RESOURCE CENTER
Universal Design is the obligation of every architect and the goal of every environment. This course will accommodate students with diagnosed disabilities, who should contact the instructor to initiate a discussion regarding what is needed for this class. Students registered with the Disability Resource Center will submit the associated documentation to the instructor. Students may also contact Disability Resources (520-621-3268).
http://drc.arizona.edu/teach/syllabus-statement.html

RETENTION OF WORK
Work produced in this course is the property of the School of Architecture, which may retain any student project for display, accreditation, documentation, or other purposes.

CHANGES
This syllabus is subject to change with notice, as deemed appropriate by the instructor. The purpose of a detailed syllabus is to make the course as transparent and as objective as possible, and thus to empower students to understand and earn the grades to which they aspire. It is not the intention of such a system to be used against learning or fairness. Consequently, the professor retains the right to make adjustments that account for circumstances that were unforeseen when the course was designed and will notify the students when such changes are made. It may, for example, be advantageous to add or alter assignments or their criteria, or to modify criteria or project-weights, if it becomes evident that it is in the best interest of learning and fairness to do so. Students will notify the professor within one week of notification if such changes engender a hardship, after which time it will be agreed that students understand and are in accord with the change.