The ‘Kepler System’:
10 Years of Digital Outcome Assessment in Architecture, Art and Design Schools

John Cays and Burcak Ozludil
College of Architecture and Design
New Jersey Institute of Technology
AASL Conference, Seattle, March 2016
1 The “tool”: technical components of Kepler
2 Users and workings of Kepler
   2a Internal users and assessment
   2b External users and assessment
1 The “Tool”: What is Kepler?

- a digital collection tool
- an internal and external assessment tool
- portfolio building tool for students
- a highly visual communication system
1 The “Tool”: What is Kepler?

• Who uses Kepler?
  • internal: students, faculty members and administrators
  • external: accreditation teams
• How do technical components work?
• What does Kepler do?
2 Users and workings of Kepler

2a Internal users and assessment

• Encourage students to properly format their own work, to post to an open and standard forum and to provide a portfolio to share with peers, instructors and potential employers.

• Give the faculty an instrument to collect and evaluate student work, share course outcomes and improve teaching efficacy through peer dialogue.

• Provide the administration with persistent empirical data to assess the current state of all design programs.
Welcome to Kepler:
A Transparent Coursework Review System

To access the Current Spring 2016 Courses click here

Log on Instructions for Students
Log on Instructions for Faculty

Previous semesters:
To access the Fall 2015 semester: http://kepler3.njit.edu/coad/2015fall/default.aspx
To access the Spring 2015 semester: http://kepler3.njit.edu/coad/2015spring/default.aspx
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2015 Fall Semester

For CoAD Students and Faculty new to Kepler

In the top navigation list above you will find:

Art + Design courses under the "AD" tab
Architecture courses under the "Arch" tab
Digital Design courses under the "DD" tab
Industrial Design courses under the "ID" tab
Interior Design courses under the "INT" tab
Grad Architecture courses under the "Graduate" tab

Once inside you can find:

your Studio course under the "Studio" tab
your History, Building Systems or other professional allied course under the "Lecture / Seminar" tab
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ARCH 161

ARCH 161: Intro Design and Digital Media | John Rhett Russo | 2015 Fall
ARCH 161: INTRODUCTION TO DESIGN
CORE 16 CU/FALL 2015


Richard Gatter
Riise Russo (C)
Jessica Blanda
Julianne Gitler-Pepx
Brandi Knapp
Enesha Matlant
Thomas Oguzkak

mardi@jnj.edu
Office 227
Office hours by appointment

OVERVIEW

Successful learning requires three things, curiosity, discipline, and precision. This course is designed to introduce you to the fundamentals of architecture, through the iterative process of making. The studio is conceived as a series of interrelated exercises that will introduce you to a range of architectural objects, new tools, and techniques, in order to increase your ability to visualize, communicate and execute your work. Each project will provide you with an opportunity to synthesize the material and the technical, within the areas of cultural practice. We will focus on a shared work ethic that situates technology at the core of our design thinking. In order to technology to work it often makes familiar things strange, even the most common aspects of our digital tools like the paper cutter file can become sites of wonder and opportunity. We will focus on using these tools precisely while exploring ways of putting them to new uses. In order to approach these questions, the studio consists of weekly exercises that gradually become more detailed. By the end of the first semester, you should have a clear understanding of architectural composition and craft. Moreover, you should also have awareness for the issues that are central to both the profession and our discipline.

8/30/15

CONTENT

On architecture
"Designing from the inside in, as well as the inside out, creates necessary tensions, which help make architecture. Likewise the inside is different from the outside, the wall - the point of change - becomes an architectural event. Architecture occurs at the meeting of interior and exterior forces of use and space." - Robert Venturi, Complexity and Contradiction
Assignment Descriptions
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EX03.01: APERTURE

CORE I/ ARCH 161

Assigned: September 23 / Due: October 5

Unlike paper, walls are thick. This project will begin with the exterior surface of your volume. The task is to design two apertures in the surface. These will be executed as details at twice the size of your previous model.

WHAT Apertures are the holes situated within the wall thickness at the threshold between inside and outside. This project challenges you to develop a methodology for designing the form, proportion depth and placement of apertures within the thickness of the wall to control the play of light.

HOW Locate two regions on your exterior model where different types of opening can be developed. The two apertures must exhibit similar features and be designed as part of a family. Double the size of these regions. Make 1 new model for each aperture. Develop each aperture within a thickened surface made of paper. This surface will require you to develop the sectional profile of the wall. Color: Employ at least one colored paper (Canson Mi-Teintes Assorted Color Packs, 98 lb., color can be either Muted, Pastel, or Portrait ONLY) to distinguish, the inside from the outside, or the aperture from the threshold. Plexiglass is not permitted. The opening on the outside may not be the same as the opening on the inside of the envelope. This project will add Form it to your procedural workflow for solar analysis.
SOUTHERN FACE
View from the Southeast
Summer / Fall / Winter
LAT 40.74  LONG -74.17

SHADOWS
12 PM JUNE 21

SOLAR GAIN (BTU/HR)
JUNE - AVERAGE

12 PM SEPT 21

SEPT - AVERAGE

12 PM DEC 21

DEC - AVERAGE
2b External users and assessment
### NAAB B. Arch. Student Performance Criteria Matrix - Fall '12-'13 / Spring '13

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<th>Course Code</th>
<th>Course Title</th>
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**KEY**
- Underlined:
- Italics: For convenience, the table is provided to suggest a starting point for the location of evidence that satisfies each of the NAAB Student Performance Criteria.
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<td>B1 Use of Precedents</td>
<td>C1 Collaboration</td>
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<td>A2 Design Thinking Skills</td>
<td>B2 Pre-Design</td>
<td>C2 Client Role in Architecture</td>
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<td>A3 Visual Communication Skills</td>
<td>B3 Accessibility</td>
<td>C3 Client Management</td>
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<td>A4 Technical Documentation Skills</td>
<td>B4 Site Design</td>
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<td>A5 Fundamentals Design Skills</td>
<td>B5 Comprehensive Design</td>
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<td>A7 Use of Procedures</td>
<td>B6 Environmental Systems</td>
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<td>A8 Design for Order Systems</td>
<td>B7 Building Envelope Systems</td>
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Arch 263: Undergraduate Design Studio

COLLEGE OF ARCHITECTURE AND DESIGN @ NJIT
Fall 2013

Schedule

September

I

Mon. 9/2 Labor Day Holiday

Movie: Man on Wire.

Thurs. 9/5 Studio: Project-One Documentation and Analysis CE Reading One Issued (Daylight).

II

Mon. 9/9 Studio: Pin-Up Design Preliminary Review. Student CE Quiz One.
Last day to add a course. Last day to withdraw 100% Refund.

Wed. 9/11 Studio: Desk Critique. Lecture 01: Metal Architecture.

Thurs. 9/12 Studio: Desk Critique

III

Mon. 9/16 Studio: Final Review – Assignment One (Paired reviews). CE Reading Two Issued (Tall...
Assignment Three – Part II: Little Falls’ Raptor Center

Type: Individual work.
Requirements: Diagrams, Plans, Sections, Elevations, Renderings, Physical Model(s).
Due Date: Tuesday, November 26, 2013

Introduction

Students are reminded this final assignment requires the application of all knowledge and techniques gained throughout the semester in the development of a coherent architectural design. Building upon the exploration of context, defined in the broadest sense of the word, this final assignment has added technical and functional specificity of context as a foil for creative thought. Specific focus will be given to the technical and functional verification of the project concept in the architecture.
NAAB 2014 | NJSOA Bachelor of Architecture Studio Courses → Arch 263: Studio I F13 → 4 Raptor Center Little Falls NJ

Search this site...
View: All Pictures

Arch 155: Modes of Communication I
Arch 155: MoC I F12
Arch 155: MoC I F13

Arch 156: Modes of Communication II
Arch 156: MoC II S13

Arch 163: Intro to Design I
Arch 163: Design I F12
Arch 163: Design I F13

Arch 164: Intro to Design II
Arch 164: Design II S13

Arch 263: Studio I
Arch 263: Studio I F12
Arch 263: Studio I F13

High Pass
Marginal Pass
Raptor Center
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COLLEGE OF ARCHITECTURE AND DESIGN @ NJIT Fall 2013


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