

Dear Students

This syllabus was written in March, before the budget crisis hit our university. Due to budget issues the intended plans to team teach with Professor Killing can not go forward.

The syllabus will remain as described, but not in a joint class format.

The field trip to Germany and Switzerland has been cancelled due to 10% paycuts and forced faculty furloughs.

But, now, more than ever, is the time to become the best designer than you can be given the global resources, both physically and fiscally. Many have realized the power of limits and boundaries:

"I could be bounded in a nutshell and count myself a king of infinite space."

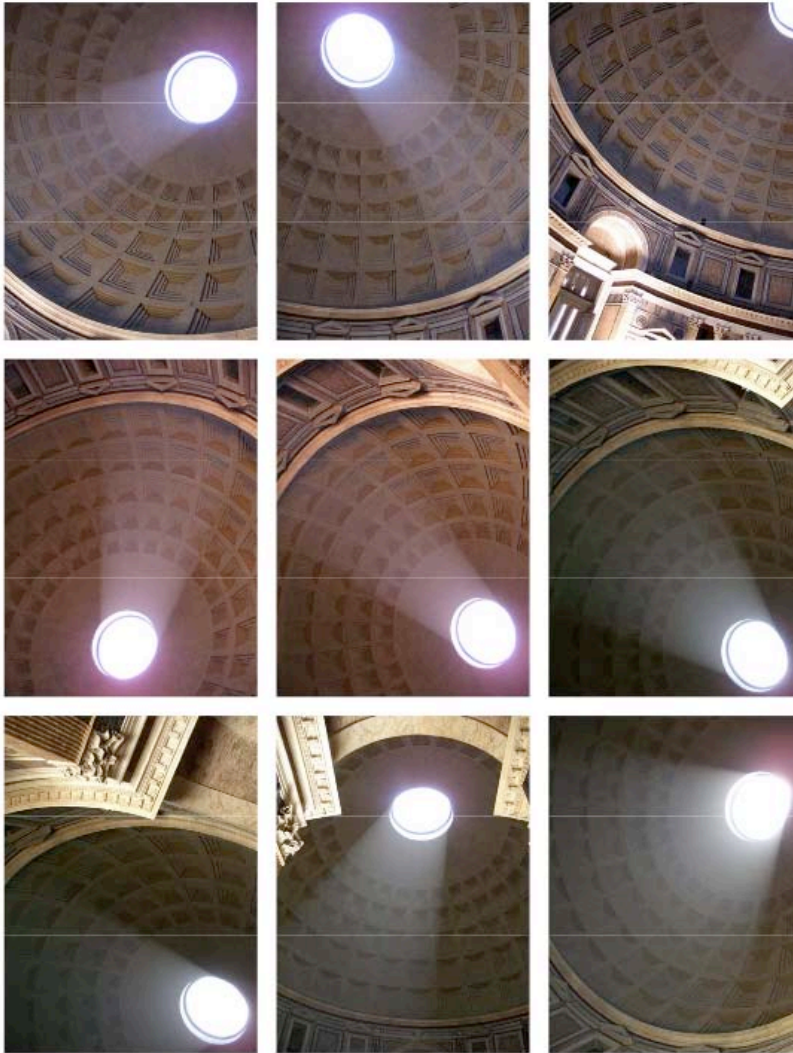
William Shakespeare (1564-1616) *Hamlet*

Laura Joines-Novotny

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ARCH 481/492 THESIS

JOINES [1/9]



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Beauty comes from within

birth of the 'new cool':
*beauty defined by
efficiency,
simplicity
ecology of form
global footprinting*

Photo: luis diaz

“
Young people go to university with the aim of becoming architects, of finding out if they have got what it takes. What is the first thing we should teach them? First of all, we must explain that the person standing in front of them is not someone who asks questions whose answers he already knows. Practicing architecture is asking oneself questions, finding one's own answers with the help of the teacher, whittling down, and finding solutions. Over and over again. The strength of good design lies in us and in our ability to perceive the world with both emotion and reason. A good architectural design is sensuous and intelligent.”

Peter Zumthor, Teaching
Architecture, Learning Architecture,
Thinking Architecture, Lars Müller
Publishers, 1999, p. 57.

09 10

ARCH 481/492 THESIS

JOINES [2/9]

“Structures, which are mostly buildings, are 85 percent of the fixed capital assets of the U.S. Buildings use 40 percent of the world’s materials flow and energy. They use about 69 percent of U.S. electricity and are directly responsible—not counting materials flows—for releasing two-fifths of the CO2, so the built environment is actually a bigger carbon emitter than either industry or transport. In some other countries, even more so. It’s 60 percent of carbon release in the U.K.

This is a design problem. It must be overcome by designers, and it’s a very worthy life’s work, both to do better going forward and to fix everything we’ve designed before. I can’t imagine a more exciting time to be an architect than now when we have not just an aesthetic and commercial reason to create a built environment that takes nothing, wastes nothing, but also a survival reason.

Create a building which does no harm, and creates delight when entered, high performance and health when occupied, and regret when departed”.

Amory Lovins, Rocky Mountain Institute

In the past schools have taught people to become architects by mainly looking at what is on the outside, what looks good, and what looks ‘cool’. Maybe the time has come that a design that once would have been seen as great looking, gets rejected and overlooked because its material consumption and energy use is not worth the global cost, and causes indignation in all of those that it affects adversely.

The objectives of this course are to allow you to develop critical thinking skills related to design in the context of a one-year, self-directed architectural project. It is assumed the project describes and communicates the design and detailing of a spatially complex place or spaces, which can include scales from furniture and objects to an actual building constructed.

Developing a personal theory of design is achieved via the research and design of a thesis project book.

The final thesis is expressed in three-dimensional models, either analog or digital, drawings and supplemental materials that summarize the investigation and design processes and the spatial product itself.

COURSE OBJECTIVES

PHENOMENOLOGICAL ATTITUDE TOWARDS FORM, MATERIALS AND ACTIONS



AESTHETIC

JUSTIFICATION OF FORM VIA PROVING IT’S GLOBAL W ORTHINESS TO EXIST



GLOBALLY FOOTPRINTED



Photo: internet sources

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ARCH 481/492 THESIS

JOINES [3/9]

We are seeking a new, more holistic tradition; one that takes the best of Modernist positions of individual beauty and heroism, and merges them with an aesthetics of interconnections, social responsibility, global footprinting, integrated sustaining systems, enlarged ecological perspective, and renewed sense of community.

This studio focuses on becoming conscious of a newly emerging paradigm, one that is diametrically opposed to Modernism and linked with issues of design relationships and world ecologies.

This shift of attention from solely visual form to justification of form and process cannot leave out the importance of the object within the web of relationships in which it actually exists.

We can make architecture that is pure in form and beauty, and woven into an integrated sustaining system; a globally footprinted aesthetic.



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ARCH 481/492 THESIS

JOINES [4/9]

By designing locally and regionally we respond globally. So, in essence, this takes us back to the **original idea of phenomenology**...paying attention to the here, the now, the situation, the site, the materiality. From micro to macro; starting with an abstraction and creating a more complex program around it from the bottom up. Not starting from the top down with a super structured hierarchy.

Why? It forces us to drag around priorities and assumptions that are not germane and it circumvents the creative process of being able to see fresh, new, and innovatively for the specific situation at hand. The true skill of the architect is not the skill of habit or training, but rather that of ingenuity, innovation and creative response; in short, the skills of the jungle fighter and explorer. In such situations, priorities are not predetermined, but are decided by circumstance. A response to circumstance is its own justification.



PhotoS: laura joines

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ARCH 481/492 THESIS

JOINES [5/9]

FAQ's

How do I choose a thesis topic?

You choose something in which there is a confluence of meaning and feeling—you experience *felt significance*. To really want to learn something about a topic for an entire year we must *value* it—we must feel its significance and perceive its quality. Start with what you value in the spatial and perceptual world, or what you see around you that shows a *lack* of these values. Start with your existing body of knowledge.

What is a thesis book?

The summary of your topic area research into a stated thesis problem.

It includes the following:

- written problem statement
- research issues
- precedent studies
- site analysis
- architectural program

A major role of the problem statement is to establish the constraints. They require that certain issues be addressed in order to solve the problem. The issues constitute the content of the problem—they meet the learning objectives for the studio. The constraints also make it a design problem. To design is to propose a solution to a problem that has some externally imposed or agreed to requirements. These requirements or “constraints” are the forces—the strain—that are placed on the final form. These strains or forces push and pull during the design process and their resolution is manifest in the final object or environment.

Constraints are often a primary source of creative ideas. The inspiration that resolves their forces can be the foundation of unique and appropriate solutions. It is important to question, analyze and redefine a problem but, at some point the problem must be accepted and its constraints made sources of creative solutions that could not have occurred without them.

It is easy to see the constraints as establishing walls that block possible solutions. However, they can also be seen as framing views. The constraints define only the few things that you cannot do or must accomplish. They do not define the infinite number of things that you can do or accomplish.

The thesis book is due at the end of fall quarter Volume I of the thesis book is due. Volume II, the illustrated ‘proof’ of part I is due at the Chumash Show in May.

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ARCH 481/492 THESIS

JOINES [6/9]

Could my project be furniture? Could I actually construct a small building?

The aim of fall quarter is to be able to identify a problem that exists in your observable world, and find a way to research and describe that problem so it can be solved by an architect. This means solved using spatial form and perception. Architects pose questions and solve resultant problems that have to with the nature of spatial experience, spatial definition, and spatial enclosure. Other subjects are often important to intertwine for inspiration, but these central themes guide the thesis project.

So, YES, you could choose any scale of expression you like.

What is your teaching method?

Differentiated instruction is used in the classroom. This means that you are in charge of your project and direction, yet I am here to help identify areas of growth and skills for you individually. Every thesis is an individual project. Therefore, your deliverables will be Individual as well. You will define these deliverables and document them in an agreement that is called "the contract". This contract will show your goals, the milestones, and the extent of work you present at the end.

In one year you are graduating into the architectural community. The main aim during this year is to develop your very individual set of logical, perceptual and abstraction sensibilities in order to integrate you into the architecture community. Your natural abilities, motivations and background support these sensibilities; open-mindedness, dedication, and interaction in studio bring them forth.

The goal is also to make certain that everyone grows in certain key skills and knowledge areas. This is handled through 492 Seminar class. This is taught collaboratively with Professor Killing.



Photo: internet

Differentiated instruction



Photo: internet



Photo: luis diaz

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ARCH 481/492 THESIS JOINES [7/9]

Objectives for the first quarter:

- Identify and contact experts from your research area
- Summarize your thesis in a book
- Define your thesis process / schedule and the scope of your work [contract]
- Critical thinking skills
- Research skills
- Use of precedents
- Select a site and provide analysis and site model
- Program preparation
- Application of sustainable planning principles
- Designing the broad strokes

Objectives for the second and third quarters:

- Developing the Design
- Develop sustainable design systems
- Integrate structural systems
- Consider site conditions
- Design for accessibility
- Design for life-safety and vertical and horizontal exiting systems
- Integrate material assemblies
- Present to the department and the university in the fifth year show

COURSE OBJECTIVES



Photo: internet



Photo: internet

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ARCH 481/492 THESIS

JOINES [8/9]

Instructor:

M. Arch, North Carolina State University 1987
Architectural Association, London, England 1986
M.S. Historic Preservation Program Columbia University, NYC 1982
A.B. Geography/Anthropology, Vassar College, Poughkeepsie, NY 1981
King's College, London, London School of Economics, London, England 1980

Professional experience includes nine years as a partner of M:OME, an architectural firm, and 4 years of practice previous with other offices in Boston and North Carolina. MOME won the AIA Honor Award in 2008 for The Teixeira House and 2 other AIA design awards previous to that for the Ehlers House and the Bridge Street Neighborhood.



This studio will be taught in cooperation with the studio of Ansgar Killing. Due to the collaborative nature of the studio with Professor Killing, students will have the advantage of 8 possible hours each studio day for instructor contact, and the opportunity to get critiques from two instructors through the course of the thesis project.

Course materials:

Course materials are available on Blackboard. Selected course materials are available as hardcopies.

Prerequisites, Description and Objectives:

Please refer to: www.arch.calpoly.edu/programs/documents/desc_492.pdf

Class Format:

Class will meet on Monday, Wednesday, and Friday in a morning session of either 9-2 or 10-3, depending on class preference. One hour of the lab will be reserved for class discussions and lectures. The remainder is to be used for design work and individual critiques. We will have collaborative s

Field Trip to Switzerland: (joint with Professor Killing's class)

Date: October | 15 – 22 | 2009 (Start Point is Zürich 10 | 17 | 2009 9:00am)
Program: ETH Zürich | Peter Zumthor | Herzog & De Meuron | Vitra | Diener & Diener | Lake Constance | Santiago Calatrava | St. Gallen |
Expected cost: Airfare (LAX – ZRH – LAX) \$ 800
Accommodation (Hotel, Hostel) \$ 600
Transportation (Train, Bus) \$ 300
Food \$ 500

All cost are estimated. Fares may vary on the time of booking.
If you do not wish to participate in the field trip the instructor we will provide you with an Alternative assignment.



Photo: laura joines

BRUDER KLAUS CHAPEL, ZUMTHOR



Photo: internet

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ARCH 481/492 THESIS

JOINES [9/9]

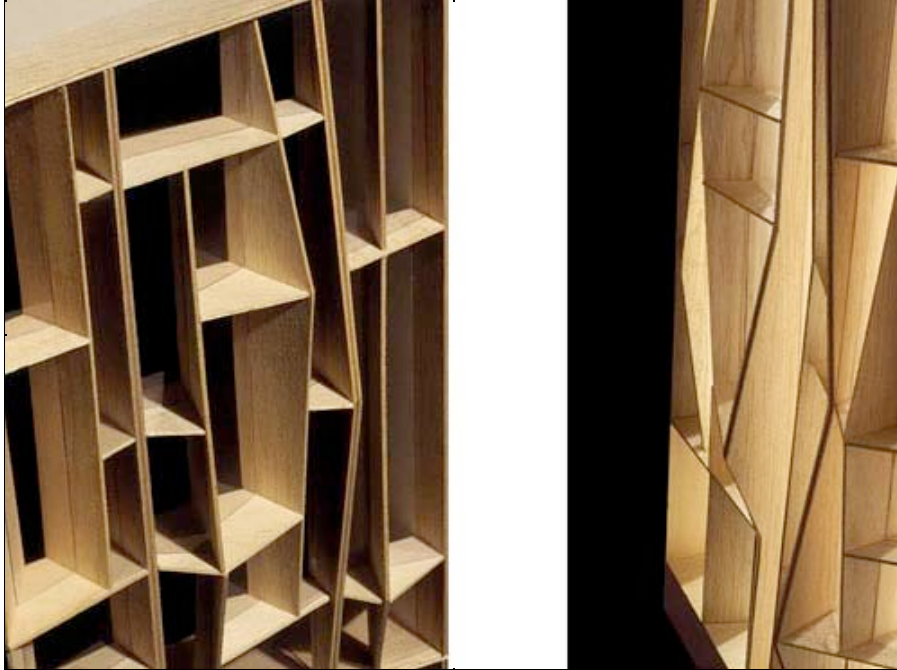


Photo: internet

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