

## L.A. Heat - From Body Heat to City Hot

Mondays 10am-1pm – Room 225

Instructors:

Marc Frohn           email: frohn@f-a-r.net  
Ilaria Mazzoleni   email: imsciarc@yahoo.com



Patrick Zimmerman of the U.S. National Center for Atmospheric Research escapes to safety with a flask containing a sample of air from burning grass and rush.

### **Course Intent**

Knowing that architecture always develops in a wider cultural, economical as well as technological context, shifts of focus in those fields very immediately inform our own discipline. While we are all well aware of the “front-seat role” the topic of global warming is taking in the political arena, a broader interest in the issues of **heat, climate and atmosphere** can be detected all around us: Artists like Olafur Eliasson focus on our perception of those phenomena while, at the same time, we find ourselves amidst an accelerating arms race in the material and technological battle for energy efficiency in the name of both the reduction of harmful emissions and the saving of our limited natural resources.

How can focusing on heat then inform our own discipline? This class looks at it both as a productive means of reading the city as well as a generative tool in the production of the built environment. In order to do so “From Body Heat to City Hot” is organized as a research and design strategy class, tying together the perceptual, technological, organizational, infrastructural and formal aspects related to heat.

On the one hand the goal of the class is to develop a multi-faceted understanding of issues related to heat. Next to this “knowledge-building” component the class also encourages the development of productive architectural skills to engage with the challenges at stake, going beyond treating heat – as is oftentimes done in architecture – exclusively as technological problem. Instead it seeks to understand its forces in shaping architecture in a wider perspective: from infrastructure, politics, building systems and finances down to the micro scale of our senses. The weekly lectures by representatives of heat-related fields and the instructors will frame a wide spectrum of knowledge on the topic of heat by providing different points of view.

## **Structure And Outcome**

### **Knowledge Building**

Based on individual investigations, the semester-long lecture series, observational findings and supportive readings, students will produce **diagrams** connecting the isolated fragments of information into productive definitions of heat.

### **Scouting**

Based on the built knowledge, students will choose a material and a formal strategy for experimenting with HEAT at many different levels: modifying temperature, coping with it or altering its perception. The goal is to create an **object** that in its operation and/or behaviour relates to the previously built knowledge.

### **Play**

Through an iterative process, students will tie the scouting object into a larger operational context framed by the lectures and thus convert the object into a concise **architectural proposal**. Its scale and content will be determined by the individual project.

## **Logistic and Grading**

Attendance is mandatory to all lectures, presentations and field trips, as per school policy.

The grade will be based on the following percentages:

3 main projects:

Research:	30%
Scouting:	35%
Play	20%

Attendance and Participation to class Discussions and Presentations: 15%

Late project presentations will not be accepted and will not be graded.

## **Course Outline**

Classes are structured in two parts: During the first hour there will be lectures by invited key-representatives of heat-related fields or Marc Frohn and Ilaria Mazzoleni. The second part will be used to discuss and develop individual student's work.

**01/07 Lecture: Course Overview**

Project 0: Defining Heat

**01/14 Lecture: Evolution of the Human Body in Relation to Climate**

Project 0: Final pin-up

Project 1: Selection and discussion

**01/21 Martin Luther King's Birthday - All School Holiday**

**01/28 Lecture: Body Heat - From Thermo Regulation to Neurological Activity**

Project 1: Review

**02/04 Lecture: Heat & Fire I: Burning Man**

Project 1: Final Review

**02/11 Lecture: Tempering the Building: Structural Solutions**

Project 1: Presentation

Project 2: Hand Out

**02/18 Lecture: Tempering the Building: Power-Based Solutions**

Project 2: Review

**02/25 Lecture: Tempering the Building: Material Solutions**

Project 2: Review

**03/03 Lecture: Urban Heat & Energy**

Project 2: Review

**03/10 Lecture: Heat & Fire II**

Project 2: Final Review

**03/17 Lecture: City climate**

Project 2: Presentation

Project 3: Hand Out

**03/24 Lecture: Global Heat: The Tradable Currency**

Project 3: Review

**03/31 Field Trip: Observing The Earth / Mapping from Above**

Project 3: Final Review

**04/07 Final Presentation**

Note: the schedule is subjected to revision and change.