

## Housing Design

For the past 50 years, housing in the US has been a response to increasing affluence, marketing, and the landscape of the automobile. In the next 50 years, housing design will need to respond to a very different set of parameters - climate change, high fuel prices, infrastructure implosion, and a loss of economic preeminence in the world. How we design housing will have a major impact on the world itself, and on how well we as a people can transition to this new set of circumstances.

To effect this change, housing must meet a wide range of requirements and human needs, at scales which range from community design to critical inches. With these new demands, the complexity of housing design will rapidly increase: there will be more dense, compact developments, and with this density come new design challenges.

Historically, housing production in the United States has been accomplished with a minimum of resources (both financial and intellectual), so that much housing design is simply a problem-solving reaction to the most salient pressures, lacking any clear architectural or social vision. If this is to improve, to achieve an architecture that Glenn Murcutt calls "essential and poetic", it must do so with probably no more material resources, but with greater mental resources - intelligence, design skill, and rigor. To effect this transition, the architect must be well-grounded in the current reality of housing production, but equally clear on the goals it must achieve in the future.



the 1990s



the 21st century?

### Course Content

This course will examine issues in housing design and production in two time frames: the factors and constraints which drive housing in the United States today (and the externalities which are often ignored), and the changing forces which will drive it in the future. For each, the emphasis will be upon the how the built environment is a response to the underlying conditions, and how changes in those conditions will lead to changing housing. Sustainability cannot be achieved through good intentions, but only by clear goals and appropriate strategies; the intent of this course is to bring together in one place the basic information and principles needed to effect change in housing design, structured in such a way as to make it directly helpful as it is applied in the design process. Topics to be covered include:

- housing development - the industry and its procedures
- regulation - zoning - ordinances and requirements
- \* LEED criteria for new housing
- site selection and design
- household types and changing demography
- building and dwelling unit typologies
- building codes and conventional construction
- \* indoor environment needs and mechanical systems
- industrialized housing / open building systems
- \* futureproofing and adaptability of housing stock

### Course Format and Requirements

This course will meet once a week, with presentations by the instructor and visitors. There will be local field trips during a couple of class periods.

Students will complete two projects in this course, working in small groups:

1. finding and mapping ten historic Portland projects, according to criteria from the instructor's database.
2. a case study of a typical typical housing project from the pre-war or post-war eras, using local examples.

### Texts:

#### Required:

#### Suggested:

Reading excerpts on course Blackboard site  
*Good Neighbors* Jones, Pettus and Pyatok  
*Global City Blues* Dan Solomon