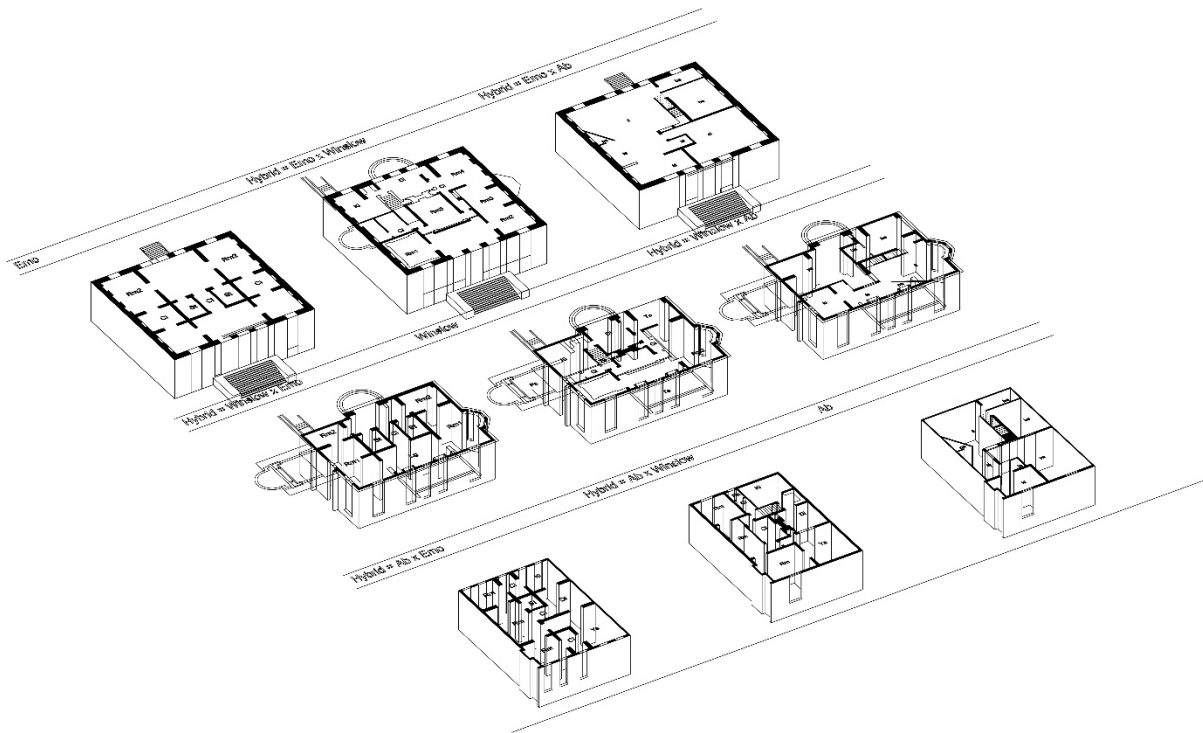


4509/6509 Special Topics in Visual Representation Architectural housing systems for single housing



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Single housing constitutes an important challenge for most architects. Throughout the last five centuries the brief and programmatic challenges presented a few changes, despite design languages differences, tectonics and specific approaches. Functions such as living, sleeping, food preparation, services and storage remain as important requirements as ever.

This course proposes a new methodology for single housing design by prompting a process to design a family of solutions rather than singular designs. The elective course will be composed by three stages: 1) analysis of a case study, 2) design systems 3) generic housing grammar

A case study of three architectural languages is presented: Palladian villas, Wright's prairie houses and Siza's Malagueira houses. Theoretical classes to explore different languages are to be held. Different design solutions will be exposed for each example of case study. Discussion is encouraged. Potential to propose field trips to visit houses of one of the studied languages (or if unattainable to visit local houses) from a distinguished language. The second stage encompasses research into different types of design systems. Reflection on rule-based systems, parametric design and shape grammars. Examples of each system should be given. The third stage focus on generic housing grammars. The concept of shape grammars is explained and discussed as means of analysis and design methodology. The exploration of the potential of housing grammars is exposed.

Students are required to develop and propose a design system illustrated through a grammar, rule-based system or other strategies which can showcase clearly a design system applied to single housing.