

In spite of the thousands of new units built every month, Charlotte continues to be in an affordable housing crisis with an on-going shortage of approximately 34,000 units. In addition, many low income household are housing cost burdened, spending over 30% of their monthly incomes on housing and housing-related costs such as utilities and commuting costs. This studio will develop prototype sustainable, affordable housing systems in partnership with local non-profit and professional organizations. These prototypes will be designed to be built by these partners in the future.

COURSE COMPONENTS

This studio will focus on design of a system that can be used for single-family and small-scale multi-unit housing that addresses the lack of “missing middle” (under 10 unit) development currently going on in Charlotte. We will be working in a real neighborhood with real community members and development partners. In order to create designs that can be built, we will need to understand the following (and probably some more):

- Case studies of high-density low-scale affordable housing
- Construction methods – on-site stick built; modular systems; panel systems
- Spatial efficiency = elegant design
- Energy and water systems – power supply, heating, cooling, potable water, graywater, storm water
- Passive systems
- Land costs, permitting costs, development costs
- Code requirements, restrictions, opportunities
- Neighborhood needs, desires, concerns
- Gentrification
- Affordable housing financing

COURSE SCHEDULE

- In general, the first half of the semester will focus on development of a single-unit design made up of components that can be used to create a multi-unit system during the second half of the semester. Applications of both scales will be shown adapted to different site conditions.
- Throughout the semester there will a variety of meetings and small field trips to sites, community meetings, professional offices, fabricators, and building sites. We will also visit affordable housing from different eras. These will all be in the Charlotte area or nearby.
- During field trip week there will be a longer trip to see high-density, low-scale affordable housing projects in Atlanta, Baltimore, or Philadelphia.
- Students can work individually or in pairs. Small groups will be created for weekly internal critiques between students.

