“Green” and “sustainability” are buzz words in the built environment, but rarely do physical environments ever come close to achieving anything close to true sustainability. This course will explore opportunities in the design, construction, planning, psychology, facilities management, and natural resources fields for facilitating higher targets, thresholds and achievements in the built environment, primarily as outlined through the Living Building Challenge and the WELL Building Institute. These frameworks address categories such as social equity, carbon neutrality, material toxicity, nourishment, fitness, mind, justness, and more. Reaching beyond the standards of current green building practice and public policy, the class will explore methods and case studies using these cutting-edge frameworks.

The Living Building Challenge is based on the LEED Rating System, rooted in the Leadership in Energy and Environmental Design criteria. However, now touted as “the built environment’s most rigorous performance standard,” a Living Building has expanded its reach while narrowing its thresholds. The system has seven performance categories, or Petals: Place, Water, Energy, Health & Happiness, Materials, Equity and Beauty. Issues pertaining to these topics can be implemented in any number of contexts, with any number of building types. These will be explored.

The WELL Building Standard (R) is “an evidence-based system for measuring, certifying and monitoring the performance of building features that impact health and well-being.” The focus of this systems is to look inward, aiming to directly benefit the the users’ health, well-being, happiness and productivity.

The course will focus on case studies of and implementation strategies towards these goals, including Living Building Challenge and WELL Building Institute projects in the region.

The intent of this course is to understand what achieving sustainability in the built environment truly means, and to critically assess methods and opportunities to reach that difficult goal.

Assignments will include weekly readings, critical thought pieces, and case study development. Grades also include class participation and attendance. The final project will address modifying an existing project - or design for a project - to be more inline with both the WELL Building Standard and the Living Building Challenge, likely in partnership with a local firm.

Questions? Contact traci_rider@ncsu.edu