

ARCH 594-DDH: Daylighting Design and Human Health

Instructor: Mohamed Boubekri, Ph.D.

Schedule: 2:00-3:20 pm TR, TBH #17

Credits: 3 cr.



A growing awareness has emerged recently in terms of the health benefits of natural light. The fact that buildings through their shapes and envelope filter a large amount of daylight may impact building occupants' health and wellbeing. Research in this area has been unfortunately limited. Despite its scarcity, evidence points to potential health problems when people are not exposed to sufficient quantity of daylight. After all, people spend as much as 90% of their lifetime indoors. It is, therefore, important to explore this condition.

In this course students will learn about the basic principles of the utilization of natural light in buildings (daylighting), and how it impacts building occupants' comfort, performance, health and general wellbeing. Through a series of lectures, case studies, and round table discussions students will be exposed to the impact of natural light, or lack thereof, on the health and wellbeing of building users. In addition to quantitative building performance paradigms, the building occupants will be used as the primary gauge to assess the success or failure of architectural design solutions