ARCH 573
Chronic Disease and Post Industrial Transformations

Students may choose to concurrently take the seminar:
ARCH 576: Chronic Disease and Post Industrial Transformations
for a more thorough understanding of the design issues.

Professor: William Worn, AIA, LEED AP, EDAC

Practice Critics:
Mr. Percy Roberts, President, COO, VOA Associates
Mr. David Kuffner, AIA, Principal, OWP/P Cannon Design

Summary
The Ebbw Vale Iron Works, later to become the Ebbw Steel works, opened in 1778, followed by the opening of a number of coal mines around 1790. At its height the steel works in Ebbw Vale was the largest in Europe. Ebbw Vale suffered from the decline of the steel and coal industries and there are now no steelworks or mines left in or around the town. In 2003 work began on demolishing the long-standing steelworks, and currently two miles of the valley stands empty awaiting development. A massive re-development plan has been designed for this area called “The Works.”

The area in and around Ebbw Vale reported (2005) that 28% of all residents have at least one long term chronic illness, ranking third highest in Wales and surpassing the UK average by more than 10%. Research has shown that people with chronic conditions are more likely to use secondary care services. The King’s Fund study on emergency hospital admissions reported that older people with chronic respiratory conditions and ‘acute on chronic’ disease accounted for the greatest use of hospital bed days, particularly during the winter months. It has also been estimated that more than 40% of NHS costs for patients with Type 2 Diabetes are associated with inpatient care.

The intent of this course is to design a ninety-six bed hospital in the post industrial city of Ebbw Vale, Wales. The hospital will act as a prototype for other post-industrial communities and will be responsive to the issues of chronic rather than acute disease. Chronic diseases are diseases of long duration and generally slow progression. Chronic diseases, such as heart disease, stroke, cancer, chronic respiratory diseases and diabetes, are by far the leading cause of mortality in the world, representing 63% of all deaths. Out of the 36 million people who died from chronic disease in 2008, nine million were under 60 and ninety per cent of these premature deaths occurred in low- and middle-income countries. This course will address the questions: What is a hospital that addresses chronic disease? Is it possible to separate urban planning from hospital design when considering chronic disease?

Field Trip
Students will make one field trip to Chicago to tour the Illinois Medical District and the recently completed Prentice Women’s Hospital.