ELECTRIC LIGHTING

IARC 492/592

Dr. Siobhan Rockcastle, Assistant Professor
Tuesday/Thursday 8:00-9:50am
3 credit + 1 credit supplement* (see below)
Prerequisites: ARCH 484/584 or IARC 484/584; ARCH 492/592

COURSE OBJECTIVES
This course offers a comprehensive introduction to electric lighting, from the physics of light, lamp technology, and luminaire specification to integrated lighting design. To develop a comprehensive understanding of the luminous environment, students will complete a series of design exercises. These exercises will include the design and construction of a physical luminaire as well as the integrated design of an interior space using digital tools to measure, test, and represent design schemes. Content lectures and critiques will be supported by invited guests from the lighting design profession. Course content will cover the physics of light, the history of lamp technology, technical specifications of electric sources, the relationship between color/transmission/distribution and space, and approaches for integrated lighting design.

LOGISTICS
This course will meet twice a week with lectures, presentations, discussions, design critiques, and working sessions with hands-on learning exercises. Assigned readings will be made available via course reserve with additional resources available in the Baker lighting Lab, the IARC Materials Room, and the MRC. Graded or P/NP.

* A 1-credit course is offered in parallel to fulfil the advanced technology elective requirement for architecture: ARCH 406/606 Sp. Electric Lighting.