CourseNo: ARCHA4821\_001\_2013\_1 Meeting Location: BUELL HALL 200 Meeting Time: R 02:00P-04:00P

Instructor Information: Leah M Meisterlin

Knowing Cities is a workshop intended to introduce students to techniques and concepts of spatial research. The course title is derived from the often overlooked relationship between methodology and epistemology in the research processes used and products created by architects, whether their investigations serve as the basis for design propositions or as stand-alone urban inquiry projects. At its core, the course asks students to think critically about the connections between How We Learn about cities and What We Know about cities. While the workshop will teach several technical skills, fundamental to the course will be an ongoing discussion on the meaning of terms such as *rigor*, *research*, *data*, *statistic*, and ultimately *knowledge* within an urban environment.

As a final deliverable, students will be asked to design a small, geographic information systems-based research project that pairs the physical conditions of a site with the socio-cultural and political situation of place. In working toward that deliverable, the class will focus on a particular set of technical skills while couching those techniques within pertinent theories of space, urban development, and representation. The course will include a brief history of mapping and its role in knowledge generation -through the act of research, the representation of findings, and the proliferation of research-based imagery - while simultaneously challenging students to move beyond that history.

Although not exclusively, the course is designed to focus primarily on analysis techniques offered through GIS software. (ESRI's ArcGIS Desktop suite package will be heavily used. Students will also be introduced to alternative and open-source GIS software packages.) The technical premise of the course is the assumption that (1) appropriately chosen and created layers of mapped information can reveal significant spatial relationships and (2) that the delineation of such spatiality forms the cornerstone of research activity in architecture and urbanism. GIS offers the ability to quantify and qualify this delineation via rigorous analysis functions relying on principles of geography, spatiality, and topology - including proximity, connectivity, contiguity, and containment. As a result, the GIS techniques taught will be contextualized within the framework of these principles such that students will exit the course with an understanding of the logic of analysis allowing them to build upon the small set of skills presentable in a short course.

The Syllabus is available on Courseworks under "Syllabus."