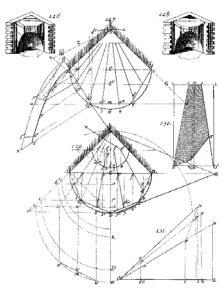
ARCH 1101—STUDIO
FALL 2018 SYLLABUS



Trait & Tromp—Philibert de l'Orme

University of North Carolina at Charlotte, School of Architecture

5 Credit Hours: Mon./Wed./Fri. 2:00 pm - 5:15 pm

Instructors: Thomas Forget (coordinator), Dean Crouch, Will Philemon, Noushin Radnia

The difference between the drawings of a painter and those of an architect are this: the former takes pains to emphasize the relief of objects in painting with shading and diminishing lines and angles; [the latter] reveals the extent and shape of each elevation and side—[the architect] is one who desires his work to be judged not by deceptive appearances but according to certain calculated standards.

Leon Battista Alberti, *On the Art of Building in Ten Books,* Book Two, Chapter 1

STRUCTURE

The School of Architecture's undergraduate program begins with two coordinated courses devoted to foundational principles of environmental design: a 5-credit studio (ARCH 1101), which meets Mondays, Wednesdays, and Fridays (2:00-5:15), and a 2-credit seminar (ARCH 1601), which meets Mondays and Wednesdays (11:15-12:05). Together, the courses create a 7-credit design laboratory in which students develop: 1) habits of critical thinking and working; 2) an understanding of both the mathematical principles and the cultural significance of spatial geometry; 3) a literacy in historical precedent; 4) representational and graphic communication skills; and 5) verbal and written communication skills.

The design lab proceeds along two parallel tracks, in which ARCH 1101 + ARCH 1601 intersect and overlap: a computer-based track convenes on Mondays and Fridays (2:00-5:15); and an analog-based track convenes on Mondays (11:15-12:05) and Wednesdays (11:15-12:05 & 2:00-5:15). The studio course includes both tracks. The seminar course includes only the analog track.

The objective of the parallel-track structure is two-fold: to establish a rhythm and pace of work that facilitates instruction and feedback; and to demonstrate how an array of media and methods may address common foundational design principles in unique but related ways. The internal structure of each track, meanwhile, strives to achieve greater retention through deep investigations of narrowly defined objectives. Across both tracks, students learn (and are responsible for carrying forward) a set of ideas and skills; they also (and just as importantly) learn how to learn.

CONTENT

The computer track foregrounds the development of students' geometric literacy, defined as an ability to create and understanding spatial compositions. Literacy building occurs through digital line drawing and digital modeling. Exercises entail a progressive accumulation of mathematical knowledge and skills, from Euclidean Geometry, to Projective Geometry, to Descriptive Geometry. The mathematical approach is a mode of proto-computational training, as it lays bare and demystifies the often-ignored mathematical logic of digital modeling methods. A primary objective is to confront the problem of scale, both as it pertains to the human occupation and cultural significance of spatial geometries, and as it pertains to the scalelessness of the screen in computer-based design methods.

The analog track foregrounds precedent analysis, which includes a range of historical and contemporary examples that address common themes through different geometric biases and cultural lenses. Analysis occurs through: hand drawing; physical modeling; reading; library and internet research; and low-stakes writing. Primary themes covered throughout the semester include: volumetric hierarchy and organization; horizontal and vertical circulation; site/ground/environment; context; materials. Students conduct both comprehensive case studies, as a set of common precedents is analyzed in every theme, and targeted precedent studies, as additional precedents are analyzed only in specific themes. Typological thinking is deployed to draw connections between seemingly disparate precedents and to identify distinctions between seemingly alike precedents.

PRODUCTS

In both tracks, students produce work in response to exercises and projects of varying degrees of complexity, some of which build upon each other and some of which are isolated experiments. At the end of the semester, the products of both tracks become the material of a single dual-track deliverable, which is an analysis exercise that challenges students to classify work produced across both tracks in a manner that demonstrates reflection and analysis. Different classifications of a common set of products will catalyze discussions that launch students into the next phase of their education. In addition, a video project that integrates lessons from both tracks in a different way.