**Number & Title of Course:** ARPL 102, Design Tools, 3 credits.

**Course Description:**
In this course, students will develop the ability to describe designed work in two dimensions (plan, section, and elevation), and in three dimensions (perspective and axonometric) using four modes of representation including sketching, drafting, digital, and physical modeling.

**Course Goals & Objectives:**
- the ability to think visually
- the ability to produce correct orthographic projections (plans, sections, and elevations), paraline drawings and basic perspectives.
- the ability to make physical models.
- the ability to use graphic (Adobe Creative Suite) and digital modeling (Rhino) software
- the ability to engage learning and academic discourse based on self motivation and in a manner of a college student and to be able to build knowledge cumulatively.

**Student Performance Criterion/a addressed (list number and title):**
A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.4. Technical Documentation
A.8. Ordering Systems Skills

**Topical Outline:**
- Drawing Basics (15%)
- Hand Drafting and Physical Modeling (20%)
- Digital Modeling and Representation (20%)
- Final Project (40%)

**Prerequisites:**
ARPL 101 (C- or better)

**Textbooks/Learning Resources:**

**Offered:**
Spring only; annually

**Faculty assigned:**
Rachel Dewane (adjunct) & Luis Boza (F/T) (2014)
Michelle Reinhart (F/T) (2013)
Vytenis Gureckas (F/T) (2012)