DESIGN THINKING AND INNOVATION
Transdisciplinary Capstone

Context:
In addition to the six disciplines, which provide the strong curricular foundation of our honors-level academic experience, we have designed the whole Lab Atlanta experience along a transdisciplinary arc--a Hero's Journey--with the challenges of the city of Atlanta as the opportunity and trajectory for individual and collective student growth and development.

This transdisciplinary arc of Lab Atlanta will follow the design cycle, beginning with and continuously grounded in ongoing research (informed by the disciplines studied) to build empathy and understanding for the city and its people. As this understanding grows, students will begin to work with specific users (people--either individuals or groups) and identify their needs. Students will conclude their semester by completing a capstone design challenge.

Course Description:
As an arc throughout Lab Atlanta, the design thinking curriculum will provide students with a real world, experiential and practical approach to collaboration, empathetic need-finding, and creative problem solving. Design thinking has its roots in product design, but has been applied to everything from new company products and solutions to community challenges to healthcare experiences to K-12 school challenges and everything in between. Students will learn design thinking as a process, as well as apply those skills against real world challenges.

The course will culminate in a capstone project to demonstrate mastery of the design process. The capstone during the Fall Semester 2017 will be related to the Atlanta Smart Cities and Digital Infrastructure initiative and what that means for citizens.

Course Elements:
Design Thinking will be immersed throughout the Lab Atlanta experience in four ways:
- **Foundations:** Students will participate in scaffolded challenges and skill building classes to learn the process, activities, and mindsets of Design Thinking, including Empathy, Define, Ideate, Prototype, Test, and Storytelling
- **Empathy Building in Community:** Starting from the beginning of the program, students will gain empathy for the Atlanta community and build a foundation of knowledge about the challenges faced. Students will document their findings and identify challenges they might wish to pursue individually while at LAB and as part of a team of designers after they leave LAB.
- **Capstone Challenge:** Students will work together as a collaborative team(s) to address an identified need in the Atlanta community. Students will employ the Design Thinking process to identify the need and then work through the entire process to determine a potential solution. Their prototype will be tested (hopefully a number of times) and a final presentation made to the public.
- **Integrated:** As a cross disciplinary topic, Design Thinking will also be integrated into other aspects of the Lab Atlanta curriculum, highlighting consistency in language and how the aspects of design thinking can help in anything from English to Visual Arts to Sociology to Engineering

Course Objectives:

In an experiential and real world way, this course will "show not tell" the following:

- Design Thinking, including what it is, how it has had impact, and how it can be applied
- kills and experiences in Empathy, Define, Ideate, Prototype, and Test
- Collaboration and Team, especially the value of a diverse team in getting to the right question and the right answer
- Storytelling, highlighting its value as well as experience in doing it to communicate real users and their challenges
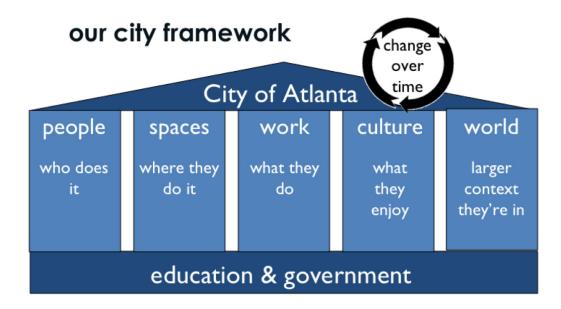
Learning Experiences:

- Experiences throughout will be largely experiential, with a focus on real world stories to illustrate key points, as well as activities and exercises where students don't just "hear it", they actually "do it"
- Experiences will be highly collaborative as students learn how to be most effective on teams, how their personal style fits, and the value of a diverse team.

Assessment:

Performance in this course will be assessed through a combination of written participation, reflections, conversations, and presentations, along with ongoing feedback to the students, ensuring they understand the concepts and can apply it in the real world

Understanding the City of:

A critical part of the course will be gaining empathy and understanding the city of Atlanta from many different dimensions, as students better understand the canvas of a city to both inspire them and to help them determine issue areas that interest them. Throughout LAB, and especially outside of design thinking class, students will gain empathy in Atlanta across the following dimensions:

- **People** (**Who does it**): Various people, groups, ethnicities, visitors, communities, and other organizations of people
- **Spaces** (**Where they do it**): Landscapes, buildings, neighborhoods, parks, roads, and other physical anchors
- **Work** (**What they do**): Jobs, industries, careers, and focuses of what people do
- **Culture** (**What they enjoy**): Arts, entertainment, sports, food, music, and activities
- **World** (**Larger context they're in**): Impact of world outside city, including elections, politics, current events, movements, and threats
- **Change over time:** Ever changing city, with different periods of history across people, spaces, work, culture, and world