**ME EN 578 Winter 2018 Lab #1: Introduction to APIs and Fusion 360**

The objective of Lab #1 is to introduce you to APIs (Application Programming Interfaces) and provide an opportunity to learn the process of searching through documentation to develop a parametric design and enhancing the capability of CAD systems. (This lab will prepare you later on in the semester when the NX Open API is leveraged in more integrative labs and assignments.)

Requirements/Deliverables:

1) Watch and work through the videos in the first 3 sublabs/sections on Fusion360api.weebly.com. These videos are designed to be stand-alone but you will search and find additional resources as needed.
2) Create a folder which can contain your submission and can be shared with the TAs and the Instructor (e.g. Google Drive, Git Hub, etc.)
3) Upload your code from each section. You are free to use any of the three valid programming languages with the Fusion 360 API. However, the videos use Python in all the examples, and therefore, using Python is highly recommended.
4) Write a one page summary of your experience and feedback covering the topics of:
   a. What you learned in the lab
   b. How it can be improved (e.g. unclear instructions, more hints needed, etc.)
   c. How the API could be leveraged in your own research/hobbies

Rubric:

Completion / Submitted Code          35 Points

Lab Summary / Feedback               15 Points

**Total**                            **50 Points**