

syllabus for  
**start-up 1.0 - machine learning**  
**comp 398**

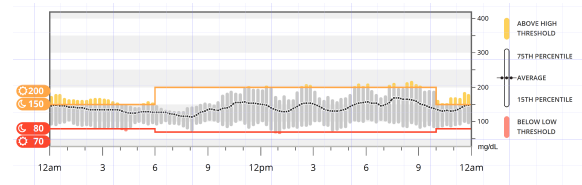
Instructor: **Mark LeBlanc**  
 mleblanc@wheatoncollege.edu  
 Meeting Times: MW 12:30-1:50, SC-1315 (csLab)

SC-1322 - 508.286.3970  
 Hours: MTW 10-11 or *appt.*

**Texts:**

*Machine Learning Mastery With R* by Jason Brownlee <https://machinelearningmastery.com/machine-learning-with-r/>

**Content:** “Machine Learning” is a new favorite phrase to include in a ramped-up business model. Next to including the term “block-chain” in your title, saying your app or experiment uses “machine learning” will generate attention. Machine learning represents a new third phase in the history of Artificial Intelligence (AI). This course is a semester-long, project-based experience that places students on teams within a (fictional) company to build prototype apps and products in a 15-week development cycle that ends with a pitch for continued funding. The emphasis includes a study and application of unsupervised and supervised methods for cluster and classification algorithms as implemented in Python and R. Student-generated products will focus on elder and/or health care related areas.



Prerequisite: COMP 215 Algorithms

**Your Grade:**

Things to do	Grading	Frequency
Resume and LinkedIn page(s) - including LinkedIn competition	5%	Sept. 5 and TBA
In-class participation	10%	always
Machine Learning Experiments (i) CGM data (ii) Authorship Attribution (iii) <i>insert your experiment here</i>	45%	throughout the semester
Final Project	(40% overall)	entire semester
<i>your</i> ability to work on a team	10%	always
<i>your</i> innovation and leadership	5%	
<i>your</i> contribution to final prototype	15%	
<i>your</i> contribution to Github repo	5%	
<i>your</i> contribution on final “pitch”	5%	Monday, Dec. 3

**Guest Speakers include:**

- Kate Boylan**, Director of Archives & Digital Initiatives, Wheaton College (digital repo’s and sharer of personal diabetes data)
- Ken Bray**, Visiting Instructor of Business and Management, Wheaton College (teaching MGMT 350 Marketing)
- Mike Caslan**, President of the Global Center for Social Entrepreneurship Network (GCSEN Foundation)
- Lisa Gavigan**, Director of Career Services, Wheaton College
- Dennis Hanno**, President, Wheaton College (an expert on social innovation and entrepreneurship)
- WIN Hub** (Wheaton Innovates Now), Courtney Wilson (social entrepreneur-in-residence) and Carolyn Hart (Director)