## **AHA! Activity Health Analytics**

#### **Course Modules**

- 1. Python for Data Analytics
- 2. Working with Activity and Health Data
- 3. Activity Change Detection

### 1. Python for Data Analytics

- L1-1. Environment Setup
- L1-2. Jupyter Notebook
- L1-3. Numpy and Scipy
- L1-4. Pandas Series
- L1-5.Pandas DataFrame
- L1-A. Appendix A: Python 3
- L1-B. Appendix B: Data Structures
- L1-C. Appendix C: Markdown and Latex
- PA1. Assignment: Pandas and K-Means

# 2. Working with Activity & Health Data

- L2-1. Cleaning
- L2-2. Hierarchical Indexing
- L2-3. Visualization
- L2-4. Aggregation
- L2-5. Time Series
- PA2. Programming Assignment: Clinical Data Aggregation

#### 3. Activity Change Detection

- L3-1. Fitbit Activity Data
- L3-2. Activity Density Maps
- L3-3. Physical Activity Change Detection
- L3-4. Virtual Classifier: Part 1
- L3-5. Virtual Classifier: Part 2
- PA3. Assignment: Daily Change Scores