## Data Analytics in Business - Course Schedule - Spring 2020

Week/Topic	Release Dates	Weekly Topic	Course Activities	<b>Due Dates</b>			
Module 1: Basics (Weeks 1-5)							
Week 1: Mon 6 January 2020	Jan 6, 2020 13:00 UTC = 8:00 am EST	Linear Regression & Learning R Real Estate Example	ISLR, Sections 3.1, 3.2 Intro to R TASK: Ungraded Self-Assessment Opens				
Week 2: Mon 13 Jan 2020	Jan 10, 2020 13:00 UTC = 8:00 am EST	Customer Analytics using Indicator Variables and Interaction Terms	ISLR, Section 3.3				
Week 3: Mon 20 January (ML King Holiday)	Jan 17, 2020 13:00 UTC = 8:00 am EST	Nonlinear Transformation Models	Interpreting Nonlinear Models  TASK: Graded Homework #1 released on Thu 23 January Self-Assessment 1 questions released Fri 24 Jan 8 am	Ungraded Self-Assessment Due Jan 22, 2020 at 04:59 UTC = 23:59 EST			
Week 4: Mon 27 January	Jan 24, 2020 13:00 UTC = 8:00 am EST	Logistic Regression. Customer Default example	ISLR, Section 4.3 TASK: Self-Assessment 1 Opens				
Week 5: Mon 3 February	Jan 31, 2020 13:00 UTC = 8:00 am EST	Treatment Effect, Randomized Controlled Experiments, and Natural Experiments	Program Evaluation and the Diff-in-Diff Estimator TASK: Self-assessment 2 questions released Fri 7 Feb 8 am	Self-Assessment 1 Due Feb 5, 2020 at 04:59 UTC = 23:59 EST Graded Homework #1 Due Feb 5, 2020 at 04:59 UTC = 23:59 EST			
Module 2: Finance (Weeks 6-8)							
Week 6: Mon 10 February	Feb 7, 2020 13:00 UTC = 8:00 am EST	Introduction, and Measuring Risk and Return	Assessment: Warren Buffett risk and return case TASK: Graded Homework #2 Opens TASK: Self-Assessment 2 Opens				

Week 7: Mon 17 February	Feb 14, 2020 13:00 UTC = 8:00 am EST	Measuring Risk Adjusted Performance	Assessing Warren Buffett's alpha TASK: Self-Assessment 3 Opens	Self-Assessment 2 Due Feb 19, 2020 at 04:59 UTC = 23:59 EST			
Week 8: Mon 24 February	Feb 21, 2020 13:00 UTC = 8:00 am EST	Factor Investing	What drives Warren Buffett's alpha? TASK: Self-Assessment 4 Opens	Graded Homework #2 Due Feb 26, 2020 at 04:59 UTC = 23:59 EST Self-Assessment 3 Due Feb 26, 2020 at 04:59 UTC = 23:59 EST			
Module 3: Marketing (Weeks 9-11)							
Week 9: Wed 2 March	Feb 28, 2020 13:00 UTC = 8:00 am EST	Marketing and Advertising	Read: (Course Pack) Advertising Experiments at the Ohio Art Company  TASK: Self-Assessment 5 Opens	Self-Assessment 4 Due Mar 4, 2020 at 04:59 UTC = 23:59 EST			
Midterm Test	Opens Thurs, Mar 5, 2020 13:00 UTC = 8:00am EST	Test on first 8 weeks material		Take Midterm Test parts 1 & 2. Due Wed, Mar 11 at 03:59 UTC = 23:59 EST			
Week 10: Mon 9 March	Mar 6, 2020 12:00 UTC = 8:00 am EST	Implementing Integrated Digital Marketing	Read (Course Pack): Star Digital: Assessing the Effectiveness of Display Advertising TASK: Self-Assessment 6 Opens	Self-Assessment 5 Due Mar 11, 2020 at 03:59 UTC = 23:59 EST			
Spring Break – (Mar 16 – 20)							
Week 11: Mon 23 March	Mar 20, 2020 12:00 UTC = 8:00 am EST	Implementing Predictive Marketing Across Channels	Read (Course Pack): Chase Sapphire: Creating a Millennial Cult Brand. TASK: Self-Assessment 7 Opens	Self-Assessment 6 Due Mar 25, 2020 at 03:59 UTC = 23:59 EST			

Module 4: Operation Management (Weeks 12-15)						
Week 12: Mon 30 March	Mar 27, 2020 12:00 UTC = 8:00 am EST	Introduction and Managing Queues	Read: The Supply Chain Economy and the Future of Good Jobs in America, by Mercedes Delgado and Karen Mills (2018)  (Course Pack) Operations Management Reading: Managing Queues, by Elliott Weiss  TASK: Graded Homework #3 Opens  TASK: Self-Assessment 8 Opens	Self-Assessment 7 Due Apr 1, 2020 at 03:59 UTC = 23:59 EST		
Week 13: Mon 6 April	Apr 3, 2020 12:00 UTC = 8:00 am EST	Statistical Process Control	(Course Pack) Read: Statistical Process Control, by Nelson Fraiman TASK: Self-Assessment 9 Opens	Self-Assessment 8 Due Apr 8, 2020 at 03:59 UTC = 23:59 EST		
Week 14: Mon 13 April	Apr 10, 2020 12:00 UTC = 8:00 am EST	Forecasting Demand	(Course Pack) Read: Time Series, by Phillip Pfeifer TASK: Self-Assessment 10 Opens	Graded Homework #3 due on Apr 15 at 03:59 UTC = 23:59 EST Self-Assessment 9 Due Apr 15, 2020 at 03:59 UTC = 23:59 EST		
Week 15: Mon 20 April	Apr 17, 2020 12:00 UTC = 8:00 am EST	Inventory Management	(Course Pack) Read: Managing Inventories Reorder Point System, by Robert Landel, James Freeland.	Self-Assessment 10 Due Apr 21 (Tuesday), 2020 at 03:59 UTC = 23:59 EST		
Final Exam						
Final Exam	Opens Thu, Apr 23, 2020 12:00 UTC = 8:00 am EST	Cumulative Project/Test based on the Whole Course		Final Exam is due Wed, Apr 29, 2020 at (23:59 EST)		