

Data Analytics in Business - Course Schedule - Fall 2019

Week/Topic	Release Dates	Weekly Topic	Course Activities	Due Dates
General Regression Analysis (5 weeks)				
Week 1	Mon 19 Aug 2019 12:00 UTC = 8:00 am EST	Linear Regression & Learning R Real Estate Example	ISLR, Sections 3.1, 3.2 Intro to R	
Week 2	Mon 26 Aug 2019 12:00 UTC = 8 am EST	Customer Analytics using Indicator Variables and Interaction Terms	ISLR, Section 3.3	
Week 3	Mon 2 September	Nonlinear Transformation Models	Interpreting Nonlinear Models	Graded Homework #1 released on Thu 5 Sep.
Week 4	Mon 9 September	Logistic Regression. Customer Default example	ISLR, Section 4.3	Task: Complete the self- assessment questions (1). Due Wed 11 Sep at 23:59 EST
Week 5	Mon 16 September	Treatment Effect, Randomized Controlled Experiments, and Natural Experiments	Program Evaluation and the Diff-in-Diff Estimator	Graded Homework #1 due on Wednesday 18 Sep at midnight (23:59) EST Graded Homework #2 released on Thu 19 Sep
Finance and Analysis (3 weeks)				
Week 6	Mon 23 September	Introduction, and Measuring Risk and Return	Assessment: Warren Buffett risk and return case	Task: Complete the self- assessment questions (2). Due Wed 2 Oct at 23:59 EST
Week 7	Mon 30 September	Measuring Risk Adjusted Performance	Assessing Warren Buffett's alpha	Graded Homework #2 due on Wednesday 2 Oct at midnight (23:59) EST Task: Complete the self- assessment questions (3). Due Wed 9 Oct at 23:59 EST

Week 8	Mon 7 October	Factor Investing	What drives Warren Buffett's alpha?	Practice questions released Task: Complete the self-assessment questions (4). Due on Wed 16 Oct at 23:59 EST
Marketing and Advertising (3 weeks)				
Midterm Test	Opens Thurs, Oct 10	Test on first 8 weeks material		Take Midterm Test parts 1 & 2. Due Wed., Oct 16 at 23:59 EST
Week 9	Wed 16 October	Marketing and Advertising	Read : (Course Pack) Advertising Experiments at the Ohio Art Company	Graded Homework #3 released on Thu 18 Oct
Week 10	Mon 21 October	Implementing Integrated Digital Marketing	Read (Course Pack): Star Digital: Assessing the Effectiveness of Display Advertising	Task: Complete the self-assessment questions (5). Due Wed 30 Oct at midnight
Week 11	Mon 28 October	Implementing Predictive Marketing Across Channels	Read (Course Pack): Chase Sapphire: Creating a Millennial Cult Brand.	Graded Homework #3 due on Wednesday 30 Oct at midnight (23:59) EST Task: Complete the self-assessment questions (6). Due Wed 6 Nov at midnight
Operations and Logistics (4 weeks)				
Week 12	Mon 4 November	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: Complete the self-assessment questions (7). Due Wed 13 Nov at midnight.
Week 13	Mon 11 November	Statistical Process Control	(Course Pack) Read: Statistical Process Control, by Nelson Fraiman	Task: Complete the self-assessment questions (8). Due Wed 20 Nov at midnight.
Week 14	Mon 18 November	Forecasting Demand	(Course Pack) Read: Time Series, by Phillip Pfeifer	Task: Complete the self-assessment questions (9).

				Due Wed 27 Nov at midnight.
Week 15	Mon 25 November	Inventory Management	(Course Pack) Read: Managing Inventories--Reorder Point System, by Robert Landel, James Freeland.	Task: Complete the self-assessment questions (10). Due Tue 3 Dec at midnight.
Review, Study and Final Exam (1 week)				
Week 16	Mon 2 December	Review & Study	Final Exam questions will be released on Monday 2 Dec at 13:00 UTC = 8:00 EST	
Final Exam	Opens Thu 5 Dec 2019	Cumulative Project/Test based on the Whole Course		Final Exam is due Wed., 11 Dec 2019 at (23:59 EST)