

Data Analytics in Business - Course Schedule - Spring 2020 *(updated Feb 11)*

| Week/Topic | Release Dates | Weekly Topic | Course Activities | Due Dates |
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| 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 Jan 23 Self-Assessment 1 opens Fri Jan 24, at 8 am | Ungraded Self-Assessment due Wed Jan 22 at 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 opens Fri Feb 7 at 8 am | Self-Assessment 1 due Wed Feb 5 at 23:59 EST Graded Homework #1 due Wed Feb 5 at 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 | |

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| 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 Wed Feb 19, 2020 at 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 Wed Feb 26 at 23:59 EST Self-Assessment 3 due Wed Feb 26 at 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 Wed Mar 4 at 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 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 Wed Mar 11 at 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 at 23:59 EST |

| Module 4: Operation Management (Weeks 12-15) | | | | |
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| 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 Wed Apr 1, 2020 at 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 Wed Apr 8 at 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 Wed Apr 15 at 23:59 EST Self-Assessment 9 due Wed Apr 15 at 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 <u>Tuesday</u> Apr 21 at 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 |