Data Analyst Nanodegree: General Timeline
*June 2015 and earlier*
*Updated 5/28/2015*

# Program Timeline

Your **Nanodegree program** is an *epic adventure.* Each week, you'll learn and apply new skills, and share successes and challenges with your learning community. Whatever your pace or daily schedule along the way, use the checklist below as a tool to make sure you stay on track with your cohort and cross the finish line to graduation. We can't wait to see where your adventure takes you!

**Aside from the first week, all dates listed are Mondays. Tasks listed should be completed before the following Monday. Links will take you right to the classroom to tackle the tasks! Submission deadlines are indicated in orange and work should always be submitted by Monday of the following week.*

*Click here to download this timeline, and here to see how to mark tasks as completed.*

| Week | What to work on |
|---|---|
| **Week 0** | ❑ Enroll!<br>❑ Watch the welcome video<br>❑ Complete the Readiness Assessment<br>❑ Go through your Nanodegree Orientation<br>❑ Install the libraries you will need to get started with the first course |
| ***Project: Analyzing the NYC Subway Dataset***<br>***Learn the skills in Intro to Data Science*** | |
| **Week 1** | ❑ Complete Lesson 1: Introduction<br>❑ Complete Problem Set 1: Titanic Survivor Data<br>❑ Get more familiar with Numpy and Pandas by exploring their documentation |
| **Week 2** | ❑ Complete Lesson 2: Data Wrangling<br>❑ Complete Problem Set 2: Wrangling Subway Data<br>❑ Continue exploring Numpy and Pandas |
| **Week 3** | ❑ Complete Lesson 3: Data Analysis<br>❑ Complete Problem Set 3: Analyzing Subway Data<br>❑ Review the extra materials on the Mann-Whitney U-Test, Linear Regression and Gradient Descent, available in the Downloadables section of any video in Lesson 3 |
| **Week 4** | ❑ Complete Lesson 4: Data Visualization |

| | |
|---|---|
| | ❑ Complete Problem Set 4: Visualizing Subway Data<br>❑ Make a variety of different visualizations of the subway data on your own computer |
| **Week 5** | ❑ Begin work on Project<br>❑ Make sure you read the rubric closely |
| **Week 6** | ❑ Continue work on Project |
| **Week 7** | ❑ Continue work on Project<br>❑ Consider using iPython Notebook (which comes with Anaconda) to explore the dataset on your own computer |
| **Week 8** | ❑ **Submit Project: Analyzing the NYC Subway Dataset** |
| ***Project: Data Wrangle OpenStreetMaps Data***<br>***Learn the skills in Data Wrangling with MongoDB*** | |
| **Week 9** | ❑ Complete Lesson 1: Data Extraction Fundamentals<br>❑ Complete the Lesson 1 Problem Set<br>❑ Learn more about File IO and reading and writing CSVs in Python |
| **Week 10** | ❑ Complete Lesson 2: Data in More Complex Formats<br>❑ Complete the Lesson 2 Problem Set<br>❑ Try using BeautifulSoup to parse a web page on your own computer |
| **Week 11** | ❑ Complete Lesson 3: Data Quality<br>❑ Complete the Lesson 3 Problem Set |
| **Week 12** | ❑ Complete Lesson 4: Working with MongoDB<br>❑ Complete the Lesson 4 Problem Set<br>❑ Install MongoDB and try running some queries locally |
| **Week 13** | ❑ Complete Lesson 5: Analyzing Data<br>❑ Complete the Lesson 5 Problem Set<br>❑ Starting preparing for Project 2 by reading the description and reviewing the rubric |
| **Week 14** | ❑ Complete Lesson 6: Case Study - Openstreetmap Data<br>❑ Choose what area's OpenStreetMap data you will clean, and follow these instructions to download the data |
| **Week 15** | ❑ Continue work on Project |
| **Week 16** | ❑ **Submit Project: Data Wrangle OpenStreetMaps Data** |
| ***Project: Explore and Summarize Data***<br>***Learn the skills in Data Analysis with R*** | |
| **Week 17** | ❑ Complete Lesson 1: What is EDA?<br>❑ Complete Lesson 2: R Basics<br>❑ Install the R programming language and RStudio<br>❑ Download the datasets for the course<br>❑ Begin reviewing R introductory tutorials |
| **Week 18** | ❑ Complete Lesson 3: Explore One Variable<br>❑ Complete Problem Set 3, where you will explore single variables from the diamonds dataset<br>❑ Continue reviewing R examples and tutorials |

| | |
|---|---|
| **Week 19** | ❑ Complete Lesson 4: Explore Two Variables<br>❑ Complete Problem Set 4, where you will explore pairs of variables in the diamonds dataset<br>❑ Starting preparing for Project 3 by reading the description and reviewing the rubric. You can also checkout the example project. |
| **Week 20** | ❑ Complete Lesson 5: Explore Many Variables<br>❑ Complete Problem Set 5, where you will further explore the diamonds dataset |
| **Week 21** | ❑ Complete Lesson 6: Diamonds & Price Predictions |
| **Week 22** | ❑ Choose and download a dataset for Project<br>❑ Perform an initial exploration of your dataset, remembering to carefully document observations |
| **Week 23** | ❑ Finish Project<br>❑ Create your RMD file and review your project report (the HTML file) before submission |
| **Week 24** | ❑ **Submit Project : Explore and Summarize Data**<br>❑ Learn more about Improving Your Career and fill out more of your profile. |
| ***Project: Identifying Fraud from Enron Email***<br>***Learn the skills in Intro to Machine Learning*** | |
| **Week 25** | ❑ Complete Lesson 0: Welcome<br>❑ Complete Lesson 1: Naive Bayes<br>❑ If you haven't yet, download Anaconda. This comes with scikit-learn, which you will need for the course. |
| **Week 26** | ❑ Complete Lesson 2: SVM |
| **Week 27** | ❑ Complete Lesson 3: Decision Trees<br>❑ Complete Lesson 4: Choose Your Own Algorithm |
| **Week 28** | ❑ Complete Lesson 5: Datasets and Questions |
| **Week 29** | ❑ Complete Lesson 6: Regressions<br>❑ Complete Lesson 7: Outliers |
| **Week 30** | ❑ Complete Lesson 8: Clustering<br>❑ Complete Lesson 9: Feature Scaling |
| **Week 31** | ❑ Complete Lesson 10: Text Learning<br>❑ Complete Lesson 11: Feature Selection<br>❑ Starting preparing for Project 4 by reading the description and reviewing the rubric- make sure you review the guiding questions! |
| **Week 32** | ❑ Complete Lesson 12: PCA<br>❑ Complete Lesson 13: Validation |
| **Week 33** | ❑ Complete Lesson 14: Evaluation Metrics<br>❑ Complete Lesson 15: Tying It All Together |
| **Week 34** | ❑ Begin working on Project |
| **Week 35** | ❑ Continue working on Project |

| | |
|---|---|
| | ❑ Remember to document all your observations! They will be very helpful for the final project report |
| **Week 36** | ❑ **Submit Project: Identifying Fraud from Enron Email** |
| ***Project: Tell Stories with with Data Visualization***<br>***Learn the skills in Data Visualization and D3.js*** | |
| **Week 37** | ❑ Complete Lesson 1a: Visualization Fundamentals<br>❑ Download D3.js and dimple.js |
| **Week 38** | ❑ If you are unfamiliar with HTML or CSS, or need a refresher, go through Intro to HTML and CSS |
| **Week 39** | ❑ If you are unfamiliar with JavaScript, or need a refresher, go through JavaScript Basics |
| **Week 40** | ❑ Complete Lesson 1b: D3 Building Blocks<br>❑ Complete Problem Set 1, including Mini-Project 1 |
| **Week 41** | ❑ Complete Lesson 2a: Design Principles |
| **Week 42** | ❑ Complete Lesson 2b: Dimple.js<br>❑ Complete Problem Set 2, including Mini-Project 2 |
| **Week 43** | ❑ Complete Lesson 3: Narrative Structures |
| **Week 44** | ❑ Begin work on Lesson 4: Animation and Interaction |
| **Week 45** | ❑ Complete Lesson 4 |
| **Week 46** | ❑ Review the Project description and rubric and begin work on Project |
| **Week 47** | ❑ Iterate on Project<br>❑ Share your visualization with your friends and family, and update it based on their feedback |
| **Week 48** | ❑ **Submit Project: Make Effective Data Visualization** |
| ***Project: Design and Analyze an A/B Test***<br>***Learn the skills in A/B Testing***<br>****required for cohorts April 2015 and following*** | |
| **Week 49** | ❑ Complete Lesson 1 and Lesson 2 |
| **Week 50** | ❑ Complete Lesson 3 |
| **Week 51** | ❑ Complete Lesson 4 |
| **Week 52** | ❑ Complete Lesson 5<br>❑ Review the Project instructions, submission template, and rubric and begin work on Project |
| **Week 53** | ❑ **Submit Project: Design and Analyze an A/B Test**<br>❑ Complete the Final Steps to verify your project submissions and schedule your exit interview! |