Syllabus

Instructor

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Course Dates

January 16 - March 2, 2018 (7 weeks)

Weekly Outline

Week 1:	**Introduction and Goal Setting**
	• Cursory overview of the class and its goals • Examining the delta between the promise of data and marketers' ability to act • Overview of various marketing data types and how they differ • Three simple rules for dealing with data • Qualitative vs. quantitative data, including when to use each • Examples of how data can be used to make better business decisions • Setting Goals – determining what a real goal is and what's important to track
Week 2:	**Collection and Preparation**
	• The four inputs – a review of the various sources of data and how they can be gathered • Determining the best sources of data – which data is trustworthy • Customer attributes – determining which truly matter to your business, e.g., demographics, psychographics, purchasing behavior • What to do if your data isn't perfect, e.g., dealing with missing values and how to deal with noisy data

	• Eight stages of data preparation
Week 3:	**Analysis and Interpretation** • Using summary statistics to create immediate insights • Creating simple formulas that lead to big insights • Seeing through the lies in data • Identifying trends, e.g., seasonal trends and customer lifecycle trends • Segmentation and correlation (positive and negative) • Sorting, ranking, binning, and filtering • Using visualization techniques to improve understanding • Co-mingling data from different sources, e.g., website and social media
Week 4:	**Decision** • Using data to measure the success of marketing outcomes • The anatomy of a marketing strategy • Making data ladder up to real business objectives • Separating decisions from outcomes • Placing bets – determining which marketing tactics and channels to invest in
Week 5:	**Visualization** • Overview of visualization basics • Examples of good and bad data visualization • Determining the best format for visualizing your information • Seven basic types of charts • Charts vs. infographics vs. data visualization • Deciding which patterns are worth highlighting and what to emphasize
Week 6:	**Presentation** • Determining what story you want your data to tell and how best to bring it to life • The power of narrative • Three types of presentations for delivering a forceful argument
Week 7:	**Prediction and Forecasting** • Overview of various predictive analytics and forecasting methodologies • Forecasting vs. predicting • Linear vs. logistic regression • Introduction to basic Artificial Intelligence (AI) models and machine learning • The basics of predictive algorithms and how they can be used in marketing

Course Structure

Module Content

This is a hands-on course providing students with a combination of conceptual frameworks and technical skills they can use in everyday marketing situations. Each week we will cover one step in the overall process, beginning with goal setting. Lecture-based videos supplemented by additional how-to videos and support materials equip students with a variety of tools they can immediately put to use.

- **Discussions:** Online participation in the discussions is not only encouraged, but expected. Each week, a new topic will be introduced, which students will be expected to respond to. Having taken online courses myself, I'm aware of the profound benefit fellow students can provide. Therefore, I also encourage students to post their questions in the discussions for other students to respond to. I will be regularly reading and participating in the discussions as well.

  There is also a "Class Comments and Questions" discussion that is open throughout the course. This is a great place to post thoughts or questions related to the course topics, that don't seem to fit in any of the other discussions. Or, questions about the structure of the course, assignment expectations, class grading requirements, and so on.

- **Assignments:** Each week, students will be asked to complete an assignment based on what they've learned in this course. The assignments test students' ability to apply what they've learned. Students will be given one week to complete each assignment and late submissions will not be accepted.

- **Live Class Meetings (Zoom Sessions):** In Week 1, I will hold a live class session to provide an introduction to the course and to give a brief introduction to Canvas, our online learning platform. During Weeks 2-7, we will have a class meeting along with some 1:1 sessions where students can meet with the instructor for fifteen-minutes to ask questions in a private setting. The "Office Hours Sign Up" can be found in the "General Course Materials" module.

Weekly Routine

Please work through a module each week. The expectation is that you will keep up with each week's materials so you are prepared to take on the following lesson. This is especially important if you are enrolled for credit or a letter grade.

Here are some key days of the week:

- **Monday:** Each week begins on Monday.
- **Friday:** The module for the upcoming week will be available by the afternoon.
- **Weekends:** Weekends are a great time to catch up with the current week's work. It is also a chance to get a head start on the upcoming week's work.
- **Sunday:** Each week ends on Sunday.

Required Materials

The only materials required for this course is a copy of Microsoft Excel 2013 or later. Only a basic proficiency in Excel is required, as many of the concepts are further explained in the how-to videos that accompany the main lecture videos.

There is no required text. And, while I may recommend certain books or articles in the discussions, they are not required readings and will have no impact on students' grades.

Grade Options and Requirements

Students have these grade options for this course:

- **No Grade Requested (NGR)**
  No work is required; no credit shall be received; no proof of attendance can be provided. (Not suitable for those requiring proof of attendance/completion.)
- **Credit/No Credit (CR/NC)**
  Students are required to complete the below expectations and earn an accumulation of at least 70% for credit.
- **Letter Grade (A, B, C, D, No Pass)**
  Students are required to complete the below expectations.

  Letter grades will be assigned according to these standards: A=Excellent, B=Good, C=Satisfactory, D=Minimal Pass.

There are two principle components that make up the credit and letter grade options:

- ***Assignments - 65%.*** Throughout this course, there will be specific assignments to test students' comprehension of the lessons. Assignments should be completed to the best of your ability. Each assignment will be due exactly seven days after the assignment is given and late submissions will not be accepted, unless I have given prior approval. Students are encouraged to ask questions, both of me and their fellow students, when working on assignments. Assignments will not be graded on a curve, meaning that as assignments are scored, the average score does not automatically become an average grade, e.g., B- or C+.
- ***Community participation - 35%.*** There will be discussion topics and questions posed to the class throughout this course. Students are required to respond to the questions, which should be thought of as mini-assignments. The nature of the topics will vary based on the lecture for that week.

Please note that you can log into your Continuing Studies student account and change your grading status at any point before the final day of class. Keep in mind, if you require proof that you completed a course for any reason, you must choose the Letter Grade or Credit/No Credit grading option; courses taken for No Grade Requested will not appear on official transcripts nor on grade reports. Your student account is where you will also find your final grade (please allow up to three weeks after a course has ended to view your grade); official grades are not posted in Canvas.

*Please refer to the **Continuing Studies Registration Policies page (https://continuingstudies.stanford.edu/registration-policies/registration-policies)** for more information about grades, along with policies regarding course credit, tuition, refunds, and so on.*