

# Stanford | Continuing Studies

**Course Title:** Data-driven Marketing

**Course Code:** BUS 139 W

**Instructor:** Angel Evan

## Course Summary:

BUS 139 is a course for those interested in developing a set of foundational skills in the use of marketing-related data. It is expressly designed for students without math, quantitative or statistical backgrounds and requires no expensive third-party software or hardware—only a mac or PC version of Microsoft Excel 2013 or later. Each session deals with a core data concept and is supplemented with “how-to” videos and exercises on a variety of tasks marketers commonly perform.

*\*Please see course page for full description and additional details.*

## Grade Options and Requirements:

- No Grade Requested (NGR)
  - This is the default option. No work will be required; no credit shall be received; no proof of attendance can be provided.
- Credit/No Credit (CR/NC)
  - A passing grade (for "Credit") = at least 70% of expectations accomplished
- Letter Grade (A, B, C, D, No Pass)
  - Written work, as assigned by the instructor, will determine a student's grade.

*\*Please Note: If you require proof that you completed a Continuing Studies course for any reason (for example, employer reimbursement), you must choose either the Letter Grade or Credit/No Credit option. Courses taken for NGR will not appear on official transcripts or grade reports.*

## Tentative Weekly Outline:

### Week 1:

#### Introduction & 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 and when to use each
- Examples of how data can be used to make better business decisions
- Setting Goals, determining what a real goal is what's important to track

Please contact the Stanford Continuing Studies office with any questions  
365 Lasuen St. Stanford, CA 94305  
continuingstudies@stanford.edu  
650-725-2650

Week 2:

Collection & 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, etc.
- What to do if your data isn't perfect, e.g., dealing with missing values, how to deal with noisy data, etc.
- Eight stages of data preparation

Week 3:

Analysis & 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, customer lifecycle trends, etc.
- 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
- Intro to basic Artificial Intelligence (AI) models and machine learning
- The basics of predictive algorithms and how they can be used in marketing