

USF BUS 465: Marketing Analytics

Course	Marketing Analytics Course contents © Stephan Sorger University of San Francisco BUS 465; 2017 Spring
Professor	Stephan Sorger Phone: 650.455.4411 email: sgsorger@usfca.edu ; www.StephanSorger.com
Meetings	Dates: Thursdays, 6:30 – 10:10PM; Malloy Hall MH 129, San Francisco January 26 – May 18, 2017

Course Description

This course covers the essential decision models and strategic metrics that form the cornerstone of marketing analytics. Using the insight gained in the course, students can assist companies in understanding the marketing mix and predict the outcome of marketing plans to boost return on marketing investment (ROMI). The course emphasizes case studies and hands-on learning so students can immediately apply the tools and techniques in their organizations. A variety of relevant topics are discussed, such as cluster analysis, market sizing, forecasting and positioning, conjoint analysis and new product development, promotion budget allocation, profit maximization, lifetime customer value, and web analytics.

Course Outcomes

On successful completion, participants will:

- Have a high-level understanding of the benefits and objectives of marketing analytics
- Be able to apply metrics-driven techniques to improve marketing decisions
- Understand best practices through case studies
- Learn by doing through hands-on computer spreadsheet models and metrics

Prerequisites

- BUS 360 and a minimum grade of C and (BUS 302 or BUS 492) and (BUS 204 with a minimum grade of B or BUS 294 with a minimum grade of B)
- Restriction: Class restricted to Senior

Biography

Stephan Sorger, M.S., M.B.A. is an award-winning serial marketing executive, an adjunct faculty member of several major universities, the author of multiple marketing textbooks, a popular speaker on marketing topics, and a member of several advisory boards. Stephan is an expert on marketing analytics, new product development, marketing strategy and planning. He is the author of the Pearson Prentice-Hall textbook, "Marketing Planning: Where Strategy Meets Action," as well as the ground-breaking book on analytics, "Marketing Analytics: Strategic Models and Metrics."

Office Hours

Students are encouraged to meet during office hours to discuss questions about the course or to obtain general information, such as career advice in the field of marketing. No meetings on holiday weekends.

- Thursday evenings: After class
- Saturday afternoons: 12PM-1PM at UC Berkeley Ext. Campus, 160 Spear Street, San Francisco, by appt.

Required Textbook:

Print book version: Sorger, Stephan. "Marketing Analytics: Strategic Models and Metrics." Admiral Press/CreateSpace, 2013. ISBN # 978-1481900300.

Kindle ebook version: Sorger, Stephan. "Marketing Analytics: Strategic Models and Metrics." Admiral Press/CreateSpace, 2013. ASIN # B00BIVMC6U

Resources

- Course Website: Go to StephanSorger.com and click on the "Marketing Analytics" course link to access online materials for the course. Materials include Microsoft PowerPoint-based lecture slides, case studies, Internet articles, and videos, all indexed by chapter. Request password from professor.
- Canvas: Exams and assignments will be administered through the Canvas university online learning system.

Grading and Course Components

Grading is calculated from the components shown below, using standard grading cutoff points:

100 – 94 = A, 93 – 90 = A-, 89 – 87 = B+, 86 – 84 = B, 83 – 75 = B-, 74 – 65 = C. No extra credit permitted.

	<u>Percent</u>
Analytics Project	25%
Midterm Exam	25%
Final Exam	25%
Assignments (3 * 5 points each)	15%
Class Participation	<u>10%</u>
Total	100%

Analytics Project

Students apply what they learn in class by forming teams and completing an analytics project.

- The model and its data must be non-confidential.
- Students must create their own original work and not re-purpose an existing model.
- Each person will receive their overall team's grade, using the attached "Project Grading Sheet".

Please select one of the five problems listed below, based on your organization's need.

- Market Sizing (Chapter 2): Assess size of existing or proposed market
- Cross-Tab or Regression-based Segmentation (Chapter 3A)
- Perceptual Map (Chapter 3B): Position new or existing product or service
- Competitive Analysis (Chapter 4): Identify and assess competitors in market
- Forecasting (Chapter 6): Forecast sales of new or existing product or service
- Conjoint Analysis (Chapter 7): Identify top features for new product or service
- Pricing (Chapter 8): Set prices for new or existing product or service
- Retailer Selection (Chapter 9): Assess existing distribution channel member or select new one
- Promotion Allocation (Chapter 10): Allocate advertising budget across programs
- Ecommerce Sales Model (Chapter 11): Manage ecommerce sales process

Exams

The midterm exam is closed book. Chapters in book: 1, 2, 3, 4, 5, 6

The final exam is closed book. Chapters in book: 7, 8, 9, 10, 11, 12

If the student cannot attend the final exam on the scheduled date, they must make arrangements ahead of time to take it at an earlier date.

Assignments

The class will include three take-home assignments. Students must submit solutions to the assignments by the next class period to receive full credit, unless prior arrangements are made. Please access and submit assignments through the Canvas university online learning system.

The homework assignments ask students to dive more deeply into essential aspects of marketing analytics, such as the ability to apply and interpret relevant business metrics to typical marketing situations. Three assignments will be given. Each is worth 5 points.

Points for each assignment will be assessed using the following scale, for a maximum of 5 points:

1 point: Accuracy: Students shall calculate answers within 10% of the correct answer.

1 point: Punctuality: Students shall submit assignments by the specified deadline.

1 point: Format: Students answer all questions, show calculations, and submit the document in Microsoft Word (doc) or Adobe Portable Document Format (PDF) format, starting with a blank page. Please do not copy the instructor's case, cross out the instructor's name, and hand it in as your own. Please do not submit Excel files.

2 points: Comments: Students shall include comments in the case that demonstrate they have thought about the situation facing the organization profiled in the assignment. Comments must include comparisons with similar organizations in the industry, along with research citations.

Example industry comparison:

"In the assignment, we calculated the market size as \$7.0 billion. By comparison, the Wall Street Journal stated that total U.S. sales of laundry detergents decreased from \$7.44 billion to \$7.06 billion, which compares relatively well to our estimate." (1)

(1) Source: Ziobro, Paul. "Is Innovation Killing the Soap Business?" Wall Street Journal Online. April 3, 2013.

<http://online.wsj.com/article/SB10001424127887323916304578400521297972496.html>

Class Participation

Class participation is made up of two components, attendance (5 points) and discussions (5 points).

Attendance: Students must attend classes to enjoy the full benefits the course offers. To that end, attendance will be monitored every class session, and points deducted for unexcused absences or tardiness more than 10 minutes. Students will be asked to sign in on an attendance sheet. The scoring is calculated as follows (5 points max)

5 points: Attended all classes punctually

4 points: Missed one class, or was late to one class

3 points: Missed two classes or was late to two classes

0 points: Missed more than two classes or late to more than two classes.

Discussions: Students are expected to study the assigned material to prepare for class sessions and ask relevant questions to gain understanding during class. To that end, discussions will be monitored during every class session, and points calculated as follows (5 points max):

5 points: Leads class in discussions. Helps class come to consensus. A leader

4 points: Regular contributor, with relevant examples that demonstrate understanding.

3 points: Participates occasionally

2 points: Does not actively contribute to class

1 point: Interrupts other students; Not respectful of others; Discusses irrelevant topics

Academic Integrity

As a Jesuit institution committed to *cura personalis*—the care and education of the whole person—USF has an obligation to embody and foster the values of honesty and integrity. USF upholds the standards of honesty and integrity from all members of the academic community. All students are expected to know and adhere to the University's Honor Code. You can find the full text of the code online at <http://myusf.usfca.edu/academic-integrity>. The policy covers:

- Plagiarism — intentionally or unintentionally representing the words or ideas of another person as your own; failure to properly cite references; manufacturing references.
- Working with another person when independent work is required.
- Submission of the same paper in more than one course without the specific permission of each instructor.
- Submitting a paper written by another person or obtained from the internet.
- The penalties for violation of the policy may include a failing grade on the assignment, a failing grade in the course, and/or a referral to the Academic Integrity Committee.

Student Disability Services

If you are a student with a disability or disabling condition, or if you think you may have a disability, please contact USF Student Disability Services (SDS) at 415 422-2613 within the first week of class, or immediately upon onset of disability, to speak with a disability specialist. If you are determined eligible for reasonable accommodations, please provide me with your SDS Verified Individualized Services and Accommodations (VISA) form, and we will discuss your needs for this course. For more information, please visit: <http://www.usfca.edu/sds> or call (415) 422-2613.

Behavioral Expectations:

All students are expected to behave in accordance with the Student Conduct Code and other University policies (see <http://myusf.usfca.edu/fogcutter/student-conduct>). Open discussion and disagreement is encouraged when done respectfully and in the spirit of academic discourse. There are also a variety of behaviors that, while not against a specific University policy, may create disruption in this course. Students whose behavior is disruptive or who fail to comply with the instructor may be dismissed from the class for the remainder of the class period and may need to meet with the instructor or Dean prior to returning to the next class period. If necessary, referrals may also be made to the Student Conduct process for violations of the Student Conduct Code.

Please let professor know during first week if any industries or topics are offensive and should not be discussed.

Learning & Writing Center

The Learning & Writing Center provides assistance to all USF students in pursuit of academic success. Peer tutors provide regular review and practice of course materials in the subjects of Math, Science, Business, Economics, Nursing and Languages. Other content areas can be made available by student request. To schedule an appointment, log on to TutorTrac at <https://tutortrac.usfca.edu>. Students may also take advantage of writing support provided by Rhetoric and Language Department instructors and academic study skills support provided by Learning Center professional staff. For more information about these services contact the Learning & Writing Center at (415)

422-6713, email: lwc@usfca.edu or stop by our office in Cowell 215. Information can also be found on our website <https://www.usfca.edu/student-life/learning-writing-center>.

Counseling and Psychological Services

Our diverse staff offers brief individual, couple, and group counseling to student members of our community. CAPS services are confidential and free of charge. Call 415-422-6352 for an initial consultation appointment. Having a crisis at 3 AM? We are still here for you. Telephone consultation through CAPS After Hours is available between the hours of 5:00 PM to 8:30 AM; call the above number and press 2.

Confidentiality, Mandatory Reporting, and Sexual Assault

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a mandatory reporting responsibility related to my role as a faculty member. I am required to share information regarding sexual misconduct or information about a crime that may have occurred to a USF student with the University. Here are other resources:

- To report any sexual misconduct, students may visit Anna Bartkowski (UC 5th floor) or see many other options by visiting our website: <http://myusf.usfca.edu/student-health-safety/safer>
- Students may speak to someone confidentially, or report a sexual assault confidentially by contacting Counseling and Psychological Services at 415-422-6352.
- To find out more about reporting a sexual assault at USF, visit USFs Callisto website at: www.usfca.callistocampus.org
- For an off-campus resource, contact San Francisco Women Against Rape (SFWAR) (415) 647-7273 (www.sfwar.org).

Student Accounts - Last day to withdraw with tuition reversal

Students who wish to have the tuition charges reversed on their student account should withdraw from the course(s) by the end of the business day on the last day to withdraw with tuition credit (census date) for the applicable course(s) in which the student is enrolled. Please note that the last day to withdraw with tuition credit may vary by course. The last day to withdraw with tuition credit (census date) listed in the Academic Calendar is applicable only to courses that meet for the standard 15-week semester. To find what the last day to withdraw with tuition credit is for a specific course, please visit the Online Class Schedule at www.usfca.edu/schedules.

Marketing Analytics
Project Grading Sheet
 Course contents © Stephan Sorger

Date: _____
 Topic: _____
 Members: _____

No.	Grading Criterion	Score: 1-5	Total
Deliverables			
1.	Time: 15 min. max; Start: _____; End: _____; ____min	1 2 3 4 5	_____
2.	Softcopy of Excel-based model and presentation on CD/DVD/USB flash drive	1 2 3 4 5	_____
3.	Hardcopy of presentation, printed two slides per page	1 2 3 4 5	_____
Microsoft PowerPoint Presentation			
4.	Problem Statement: Described problem clearly & completely; success criteria Comments: _____	1 2 3 4 5	_____
5.	Model Selection: Selected appropriate model type Comments: _____	1 2 3 4 5	_____
6.	Solution Process: Explained step-by-step process; diagrammed model Comments: _____	1 2 3 4 5	_____
7.	Research Method: Showed how data gathered: data sources, relevant data Comments: _____	1 2 3 4 5	_____
8.	Research Analysis: Structured results, interpreted data Comments: _____	1 2 3 4 5	_____
9.	Market Comparison: Model results compared against actual market behavior Comments: _____	1 2 3 4 5	_____
10.	Scenarios: Model executed for typical scenarios Comments: _____	1 2 3 4 5	_____
11.	Model Results: Results documented, including simulations and "what-if"s Comments: _____	1 2 3 4 5	_____
12.	Results Interpretation: Interprets findings in context of market situation Comments: _____	1 2 3 4 5	_____
13.	Conclusion: Presentation indicates how problem was solved; insights Comments: _____	1 2 3 4 5	_____
14.	Layout: Presentation emphasizes graphs and tables; Limits use of text Comments: _____	1 2 3 4 5	_____
Microsoft Excel Spreadsheet Model			
15.	Demo: Demonstration of model in class goes smoothly, no problems Comments: _____	1 2 3 4 5	_____
16.	Procedure: Spreadsheet describes how to use model Comments: _____	1 2 3 4 5	_____
17.	Inputs: Spreadsheet indicates user input area(s) Comments: _____	1 2 3 4 5	_____
18.	Outputs: Spreadsheet indicates model output area(s) Comments: _____	1 2 3 4 5	_____
19.	Calibration: Spreadsheet indicates calibration procedure, if any Comments: _____	1 2 3 4 5	_____
20.	Structure: Spreadsheet is logically laid out for ease of use Comments: _____	1 2 3 4 5	_____
Total			
	Total Score: 20 criteria x 5 pts each = 100 points max	100 max	_____
	Comments: _____		

Schedule

January 26, 2017

Meeting 1

- Administration Review syllabus; Introduce class members; Set up teams
- Project Review sample project
- Chapter 1 Introduction
- Case 1 Introduction: Project selection (in class)

February 2, 2017

Meeting 2

- Chapter 2 Market Insight
- Video Business Research Basics (9:59); Finding NAICS Codes (2:24)
- Case 2 Market sizing: U.S. laundry detergent market
- Assignment 1 Market sizing: Luggage industry

February 9, 2017

Meeting 3

- Chapter 3A Market Segmentation: Segmentation and Targeting: Pages 49 - 82
- Video Malcolm Gladwell on segmentation (17:33)
- Case 3A Targeting: Hair care industry
- Assignment 1 due

February 16, 2017

Meeting 4

- Chapter 3B Market Segmentation: Positioning: Pages 83 – 91
- Video Perceptual mapping (9:08)
- Case 3B Market positioning: Smartphone market

February 23, 2017

Meeting 5

- Chapter 4 Competitive Analysis
- Video Google Alerts (2:47)
- Case 4 Competitive analysis: Casual apparel industry

March 2, 2017

Meeting 6

- Chapter 5 Business Strategy
- Video Business strategy metrics dashboard (0:56); Balanced scorecard (10:54)
- Case 5 QSPM: Hotel industry
- Assignment 2 Strategic Metrics: Footwear market

March 9, 2017

Meeting 7

- Chapter 6 Business Operations
- Video Forecasting inflection point (14:21); Mass market backlash on adoption (4:31)
- Case 6 Forecasting: Real estate market (Regression based forecasting)
- Assignment 2 due

March 16, 2017

No class; Spring Break

March 23, 2017

Meeting 8

- Chapter 7 Product and Service Analytics
- Video Conjoint in 10 Minutes (9:33); Analytical Hierarchy Process (8:01)
- Case 7B BCG Resource Allocation: Automotive Industry

March 30, 2017

Meeting 9

- Chapter 8 Price Analytics
- Video Decoy Pricing (1:58); Pricing Segmentation (7:26)
- Exam Midterm Exam

April 6, 2017

Meeting 10

- Chapter 9 Distribution Analytics
- Video Subaru (19:55)
- Case 9 Distribution analytics: Cosmetics industry

- April 13, 2017** **No class; Easter Holiday**
- Assignment 3 Alternative Assignment for Make-Up
Pricing Analytics: Lamp Market

- April 20, 2017** **Meeting 11**
- Chapter 10 Promotion Analytics
 - Video Allocating Marketing Budget: Automotive industry (4:30)
 - Case 10 Promotion analytics: Restaurant market (Solver-based linear optimization)

- April 27, 2017** **Meeting 12**
- Chapter 11 Sales Analytics
 - Video Use Cases for Sales Analytics (17:15)
 - Case 11 Sales analytics: Online consumer electronic sales industry
 - Assignment 3 due

- May 4, 2017** **Meeting 13**
- Chapter 12 Analytics in Action
 - Video Pimp My Powerpoint (2:58)
 - Case 12 Pivot tables: Multi-channel pharmacy
 - Analytics Project Presentations

- May 11, 2017** **Meeting 14**
- Analytics Project Presentations

- May 18** **Meeting 15**
- Exam Final Exam
Special Time: 8 PM