I. General Information
   - Course number: MKTG 677
   - Title: Advanced Marketing Analytics
   - Units: 3
   - Prerequisites: IS 601 and MKTG 675
   - Course Coordinator: Reo Song
   - SCO Prepared by:
   - Date prepared/revised: October 2017

II. Catalog Description
   Advanced Marketing Analytics is the analysis of large and a variety of data to uncover customer preferences, market trends, and other useful business insights. The analytical findings can be used for effective marketing communication, better customer relationship management, and improved ROI (return on investment) of marketing activities, which ultimately leads to competitive advantages. Letter grade only (A-F).

III. Curriculum Justification(s)
   Marketing analytics increasingly plays an essential role in marketing decisions. The exponential growth and availability of customer and marketing data, both structured and unstructured, has spawned many challenges that include analysis, data curation, aggregation and data management, storage, transfer, visualization, and information privacy. The skillsets required to analyze big data go beyond the traditional statistical technique. After completing this course, students will have a better understanding of different types of data and be equipped with the necessary skill sets to analyze them.

IV. Course Objectives, Student Learning Outcomes, Evaluation Instruments, and Instructional Strategies for Skill Development
   - **Customer data analysis**: Students will learn and implement the various steps needed to obtain insights from customer data analysis. These steps include defining research questions, collecting and manipulating relevant customer data, conducting appropriate analyses, and interpreting analytic results.
   - **Theories on statistical analysis of customer data**: Students will learn the underlying statistical and customer theories to apply a proper analysis method to given research questions and types of customer data.
   - **Critical thinking**: Students will develop the ability to critically evaluate business situations, to tackle the research problem, and to determine the most appropriate analytical method.
   - **Strategic thinking**: Students will demonstrate how to gain insight from the analysis of data and to recommend a proper business strategy based on empirical evidence.
V. Outline of Subject Matter

The topics listed below must be included in the course. Additional topics can be added into the course based on the instructor’s personal preferences in teaching this course.

1. Introduction to advanced marketing analytics
2. Application of a statistical software package to analyze customer and marketing data
3. Predicting customer response to marketing efforts
4. Prediction study design for marketing actions
5. Insights on customer behavior from unstructured text data
6. Forecasting customer behavior using time series data
7. Ethical issues related to marketing analytics

VI. Methods of Instruction

A. INSTRUCTION MODE.

May refer to University policies Academic Technology and the Mode of Instruction (PS 03-11) and Course Syllabi and Standard Course Outlines (PS 11-07), for descriptions of modes of instruction and for guidelines for non-traditional modes of instruction.¹

- [ ] Traditional
- [ ] Hybrid
- [ ] Local Online
- [ ] Distance Education

B. CLASSROOM ACTIVITIES. (Optional but highly recommended for core courses)

The course should include the following components:
1. In-class data analysis exercises
2. Case analysis assignments with real world data: Case writing to recommend a proper course of action based on analytic results
3. Course group project: Define business problem, collect and clean data, conduct a statistical analysis, and recommend a course of action. A group presentation should be required. Data analysis project with a client can be accommodated as this group project.
4. Examinations: Should include questions that use a software package to analyze data. Formats should require students to demonstrate critical thinking and application/problem solving skills. Multiple choice exams are not allowed.

C. EXTENT AND NATURE OF TECHNOLOGY USE. (Optional but highly recommended for core courses)

The use of technology will depend on individual instructors, but may include BeachBoard, should include the development of familiarity with web resources

¹ The university policies listed are active as of 2017-2018 but may be subject to change in the future. For the most up-to-date policies, refer to the Academic Senate website’s Policy Statements.
specific to the course, and may include assignments that involve the evaluation of web materials on the subjects. Students may be made familiar, if they are not already, with relevant search databases in the library. Film and video may be used in the classroom.

VII. Information about Textbooks/Readings

There is no standardized textbook. The following (free) textbook can be recommended as a reference:

- *R for Marketing Research and Analytics*, Christopher Chapman and Elea Feit
- *Forecasting: Principles and Practice* by Rob Hyndman and George Athanassopoulos, available at: [https://www.otexts.org/fpp](https://www.otexts.org/fpp)

The following sources provide many useful analytics cases with business data:

- Darden Business Publishing, University of Virginia: [store.darden.virginia.edu/](http://store.darden.virginia.edu/)
- Ross School of Business, Global Lens, University of Michigan: [wdi-publishing.com/](http://wdi-publishing.com/)
- INSEAD Case Publishing: [cases.insead.edu/publishing/](http://cases.insead.edu/publishing/)
- Kellogg Case Publishing, Northwestern University: [www.kellogg.northwestern.edu/kellogg-case-publishing/case-search.aspx](http://www.kellogg.northwestern.edu/kellogg-case-publishing/case-search.aspx)
- Stanford Graduate School of Business: [https://www.gsb.stanford.edu/faculty-research/case-studies](https://www.gsb.stanford.edu/faculty-research/case-studies)

VIII. Instructional Policies Requirements

A. Policy on Classroom Behavior

- All cell phones & other electronic devices (e.g. pagers, iPads, iPods, PDAs) must be put on vibrate or turned off and not on your desk during class.
- Students are responsible for what transpired if they miss a class. It is the student’s responsibility to contact the instructor or a classmate to determine what was missed. See “Policy on Make-up Exam and Assignments” below.
- Talking and other disruptive behavior are not permitted while classes are in session.
- Students are expected and must do ORIGINAL work for all assignments, including exams. See “Academic Integrity” policy below.
- It is the student’s responsibility to notify the professor in advance of a need for accommodation of a disability that has been verified by the University.
- See also Department of Marketing Classroom and Online Conduct Policies: [www.csulb.edu/colleges/cba/marketing/classroom/](http://www.csulb.edu/colleges/cba/marketing/classroom/).  

B. Policy on Make-up Exams and Assignments

- The instructor develops his or her own policy.

C. Policies on Withdrawal, Late Withdrawals, and Incompletes
The University policy on dropping and withdrawal from classes is set forth in the schedule of classes. Students are obligated to officially withdraw from their courses even though they may not have attended. Withdrawals require the signature of the instructor, the chairperson, and the Dean of the CBA.

D. Academic Integrity
- Students are expected to do original work for all assignments, including exams.
- Students are responsible for their own conduct and all cases of dishonesty (e.g., plagiarism, cheating) will be reported to the proper university officials.
- Students are expected to adhere to CBA (www.csulb.edu/colleges/cba/dean/academic-integrity/) and University policies regarding Academic Integrity (www.csulb.edu/divisions/aa/grad_undergrad/senate/documents/policy/2008/02/).

E. Campus Computer/Network Usage
Careful and ethical use of computing resources is the responsibility of every user. As a user of these resources, you agree to be subject to the guidelines of the “Policy Governing Access to and Use of CSULB Computing Resources”. These guidelines apply to all computing resources provided by the University; some guidelines are more directly related to time-sharing systems, some to microcomputers and local area networks, and some to all systems.

IX. Course Assessment and Grading (Optional but highly recommended for core courses)

A. GRADING POLICIES AND PROCEDURES.

Final course grades shall be based on at least three (3), and preferably four (4) or more, demonstrations of competence by the student. In no case shall the grade on any single demonstration of competence count for more than one-third (33%) of the final course grade. See academic senate policy: (www.csulb.edu/divisions/aa/grad_undergrad/senate/documents/policy/2005/07/)
X. Disabilities

*Students with disabilities are responsible for notifying their instructor as early as possible of their needs for an accommodation of a verified disability. A student with disability is urged to consult with Disabled Student Services as soon as possible in order to identify possible accommodations to enhance academic success.*

XI. Assistive Technology

In compliance with Accessibility and Faculty Responsibility for the Selection of Instructional Materials (PS 08-11), instructors are responsible for ensuring that their syllabi and instructional materials are accessible to all students.

XII. Bibliography (Optional)

XIII. Consistency of SCO Standards across Sections

*All future syllabi will conform to the SCO. The course coordinator should review the SCO and offer advice and/or materials to faculty member new to teaching the course. The course coordinator may offer or require regular review of instructors’ course materials as well as anonymous samples of student work.*

XIV. Additional Resources for Development of Syllabi

- University policy Course Syllabi and Standard Course Outlines (PS 11-07)
- Academic Technology (ATS) Accessible Syllabus Template
- Faculty Center for Professional Development (FCPD) Sample Syllabus Template