

DEVELOPING AND TEACHING A HYBRID COURSE IN DATA ANALYTICS

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Data analytics is an “up and coming” curriculum area for many business schools. In 2013, in response to both new AACSB learning goals and the need to revise curriculum for internal reasons, the College of Business Administration at one of the 23 campuses of the California State University developed such a course for its MBA program; the course was later adapted by one of its developers for use in the MS in Accountancy (MSA) program as well. This presentation will discuss the development process, the course’s initial delivery and its adaptation for the MSA program.

COURSE DEVELOPMENT

An interdisciplinary committee of seven faculty members, some part-time and some full-time, participated in the development of the course. The academic fields represented on the committee included marketing, accounting and operations management / decision sciences. Three committee members attended a week-long workshop to learn the basics of SAS Enterprise Guide and SAS Enterprise Miner.

The course was laid out in the following sections:

- a. Purpose and nature of data analytics
- b. Ethics issues in data analytics
- c. Data types and structures
- d. Techniques: descriptive, predictive and prescriptive
- e. Steps in completing an analytics project
- f. Case studies and applications

The course was successfully approved through the campus curriculum process; its first offering was scheduled for Spring 2016.

INITIAL COURSE OFFERING (MBA)

By the time the course was to be offered, one of the seven developers had retired from the university. Nevertheless, no faculty member could be identified to teach the course the very first time it was offered. Therefore, the associate dean for graduate programs contacted the retired faculty member to assess his interest in teaching the course for the very first time; his discipline was accounting. (As the course was a required part of the MBA curriculum, it had to be offered in Spring 2016.)

The retired faculty member accepted, and developed the course according to the preceding outline. Due to scheduling constraints, the course was offered in a hybrid format; students attended an initial orientation meeting which featured a background lecture covering Items A through E above, along with details about assignment directions. Course assessments included assignments based on R (the open-source data analytics tool), individual case analyses and a group case analysis. Course enrollment was around 12; all students successfully completed the course.

ADAPTATION FOR THE MSA

The same instructor (still retired) was then approached by the coordinator of the MSA program to adapt and offer the class for that group of students in Summer 2016; the course was also offered in Summer 2017. Unlike the MBA program, where the data analytics course was required, the MSA program featured it as an elective. The course was still offered in a hybrid format, but the faculty member made modifications to “fine tune” its content for the MSA students.

In its latest offering (Spring 2017), students:

1. Attended an in-person lecture
2. Completed five instructional modules using R
3. Took an online exam to assess their mastery of both the lecture material and the R modules
4. Completed (individually) a series of short case-based problems
5. Completed (in a group) a comprehensive analytics project, starting with the identification of an analytics question and culminating with a final analytics report

In Summer 2017, eleven MSA students successfully completed the course.