Managerial Decision Making Process

I. General Information

- Course number: MGMT 455
- Title: Managerial Decision Making Process
- Units: 3
- Prerequisites: MGMT 300, IS 301
- SCO Prepared by: Dr. Ming Chen
- Date prepared: October 11, 2012

II. Catalog Description

Incorporates both quantitative and psychological aspects of decision making for management problems. Includes topics such as decision making with multiple objectives, decision tree, risk management, game theory, utility theory, prospect theory, simulation, and responses to performance feedback. Letter grade only (A-F).

III. Curriculum Justifications

This course is intended to provide an in-depth coverage of various topics related to decision-making in the business context. The course is designed in line with CBA learning goals. In particular, the course emphasizes analytical, reasoning, and problem solving skills. Embedded in the specific subject matter of the course is an appreciation of the following CBA undergraduate learning goals:

- Critical Thinking (General)
- Business Functions (Management-Specific)
- Quantitative & Technical Skills

IV. Course Objectives

This course introduces numerous decision-analysis concepts and tools that can help firms make better decisions. It incorporates both quantitative and psychological aspects of decision making for practical management problems. In this course, students will learn how to make
decisions when the decision problem involves a number of objectives, or when the consequences of the alternative courses of action cannot be predicted with certainty. In case there is significant uncertainty involved in the problem, students will learn how to take actions to reduce the risk and identify opportunities. Students will also learn important concepts and tools that can be used to facilitate business decision making, such as value function, utility function, expected monetary value, net present value, value of information, decision tree, influence diagram, sensitivity analysis and simulation. The general principles of game theory will also be discussed.

After taking this course, when faced with a decision-making problem, students are expected to be able to:

- Collect and analyze necessary information, structure the problem by identifying alternative courses of action, characterizing uncertain events, incorporating the decision-makers’ values and preferences, and addressing tradeoffs.
- Apply appropriate decision-making tools to analyze the problem and identify the optimal course of action.
- Conduct sensitivity analysis and examine how robust the selected course of action is to changes in input parameters used in the analysis.
- Present and communicate the results to a board audience.

V. Outline of Subject Matter

Possible topics include

- Game theory
- Decision-making involving multiple objectives
- Decision-making under uncertainty
- Decision tree and influence diagram
- Simulation
- Resource allocation and negotiation
- Utility theory
- Prospect theory
- Bayes’ theory
- Risk management
- Mathematical programming
VI. Methods of Instruction

Instructors should use appropriate instruction methods in line with course objective and learning goals. Possible instruction methods include:

- Class lecture
- Case discussion
- Individual/team project
- Homework assignments
- Presentation
- Field trip
- Simulation

There is no required textbook for this course. The following textbook is recommended:


VII. Instructional Policies Requirements

a) Instructional policies should be consistent with the course description stated in Section II, and should serve the course objectives listed in section IV of this SCO.

b) Instructors should enforce policies regarding to plagiarism, withdrawal, absences, etc., that are consistent with the University policies published in the CSULB Catalog. It is expected that every course will follow University policies on Attendance, Course Syllabi, Final Course Grades, Grading Procedures, Final Assessments, and Withdrawals. If some or all sections of the course are to be taught, in part or entirely, by distance learning in the future, the course must follow the provisions of PS 03-11, Academic Technology and the Mode of Instruction.

c) All sections of the course will have a syllabus that includes the information required by the syllabus policy adopted by the Academic Senate. Instructors will include information on how students may make up work for excused absences. When class participation is a required part of the course, syllabi will include information on how participation is assessed.

d) **Students with 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 a disability is urged to consult with Disabled Student Services as soon as possible in order to identify possible accommodations to enhance academic success.