COURSE CODE: DSIMGTS

COURSE TITLE: Prescriptive Analytics (Optimization)

COURSE DESCRIPTION:

This is a three-unit course which provides business students with the necessary skills in decision making anchored on the science of quantification. This covers the judicious use of business information from the internal and external loci of the organization as bases in making business decisions. Emphasis is made on that business analytics is not a theoretical discipline: these techniques are only interesting and important to the extent that they can be used to provide real insights and improve the speed, reliability, and quality of decisions. The concepts learned in this class should help students identify opportunities in which business analytics can be used to improve performance and support important decisions. It should make them alert to the ways that analytics can be used¿ and misused ¿ within an organization.

DEPARTMENT: Decision Sciences and Innovation Department

TEXTBOOK:

• Subscription to McGraw Hill Connect - Book/ebook:

Hillier, F. and Hillier, M. (2019). Introduction to Management Science: A Modeling and Case Studies Approach (6th ed.). New York: McGraw Hill Education.

READING LIST:

• Albright, C. S., & Winston, W. L. (2019). Business Analytics: Data Analysis & Decision Making 7th Edition. Cengage Learning Asia.

• Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm J. D., & Cochran, J. J. (2018). Modern Business Statistics with Microsoft Excel. Cengage Learning Asia.

• Camm, J.D., Cochran, J.J., Fry, M.J., Ohlman, J.W., Anderson, D.R., Sweeney,D.J., Williams, T.A. (2017). Essentials of Business Analytics (2nd Ed.) Cengage Learning.

• Render, B., Stair, R., & Hanna, M. (2012). Quantitative Analysis for Management (11th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

REQUISITE EQUIPMENT/MATERIALS FOR THE COURSE:

Required Software:

• MS Excel 2016 or later with plug-in SOLVER Add-in.
https://support.microsoft.com/en-us/office/load-the-solver-add-in-in-excel-612926fc-d53b-46b4-872c-e
24772f078ca#OfficeVersion=Windows