

COURSE CODE: COB507M

COURSE TITLE: Statistical Analysis for Business Research (MSENT, MMC, MSM & MSIRM)

COURSE DESCRIPTION:

The course is designed to help MMC, MSM, MSIRM and MSENT students understand research methodology and statistical methods in order to identify a research problem as well as plan and implement a research plan. It can aid students to evaluate research studies and use research findings to improve the quality of practice and management.

DEPARTMENT: Decision Sciences and Innovation Department

TEXTBOOK:

McGraw Hill Connect Subscription: Jaggia, S., & Kelly, A. (2019). Business statistics: Communicating with numbers. McGraw-Hill Education.

READING LIST:

Aguinis, H., Edwards, J. R., & Bradley, K. J. (2017). Improving our understanding of moderation and mediation in strategic management research. *Organizational Research Methods*, 20(4), 665-685.

Altman, N., & Krzywinski, M. (2017). Points of significance: interpreting P values. *Nature Methods*, 14(3), 213-215.

Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cochran, J. J. (2017). *Essentials of modern business statistics with Microsoft Office Excel (7th ed.)*. Cincinnati, OH: South-Western/Thomson Learning.

Bowerman, B., Drougas, A., Duckworth, W., Froelich, A., & Hummel, R. (2018). *Business statistics and analytics in practice*. New York : McGraw- Hill Education.

Garson, G. D. (2012). *Testing statistical assumptions*. Asheboro, NC: Statistical Associates Publishing.

Lakens, D. (2017). Equivalence tests: A practical primer for t tests, correlations, and metaanalyses. *Social psychological and personality science*, 8(4), 355-362.

Leeper, T. J. (2017). Interpreting regression results using average marginal effects with R's margins. *Reference manual*, 32.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. *Handbook of market research*, 26(1), 1-40.

Tian, C. H. E. N., Manfei, X. U., Justin, T. U., Hongyue, W. A. N. G., & Xiaohui, N. I. U. (2018). Relationship between Omnibus and Post-hoc Tests: An Investigation of performance of the F test in ANOVA. *Shanghai archives of psychiatry*, 30(1), 60.

Verma, J. P., & Abdel-Salam, A. S. G. (2019). Testing statistical assumptions in research. John Wiley & Sons.

Wasserstein, R. L., & Lazar, N. A. (2016). The ASA statement on p-values: context, process, and purpose.

REQUISITE EQUIPMENT/MATERIALS FOR THE COURSE:

Laptop/Desktop operating in Windows or Mac OS with: Installed R (for Mac / for Windows)

Installed R Studio (for both Mac and Windows)