DE LA SALLE UNIVERSITY - MANILA
COLLEGE OF SCIENCE
Mathematics Department

SYLLABUS

COURSE NAME/CODE: MSS911M, MSS913M, MSS915M
COURSE TITLE: Statistical Consulting 1-3
CLASS DAY & TIME:
ROOM:
NAME OF FACULTY:
COURSE CREDIT: 3 units spread over three terms at 1 unit per term
CONTACT NO. (DEPT): 536-0270, 524-4611, loc. 420
TERM/SCHOOL YEAR:

COURSE DESCRIPTION

This is a practicum course for MS Statistics students. This course is spread over three terms. **Statistical Consulting 1** taken first will discuss basic principles of statistical consulting and discuss case studies faced in actual consulting work. The second series, **Statistical Consulting 2** will be supervised consulting for 14 hours in the term and **Statistical Consulting 3** will be 14 hours of independent consulting.

PREREQUISITES: MSS911M (for MSS913M)
MSS913M (for MSS915M)

COURSE OBJECTIVES

- Appreciate the basic principles of statistical consulting
- Develop skills needed by a statistical consultant
- Demonstrate the basic principles of statistical consulting in actual consulting work in different fields such as business, finance, economics, social science, psychology, biology, medicine, and engineering, among others
- Exhibit values like:
  - cooperation through group study;
  - honesty by claiming credit only for the work he has done;
  - patience, perseverance and diligence;
  - faith by doing what is right and giving his best in performing any assigned task;
  - self-reliance by being able to solve problems independently.

Topic/ Subtopic	Learning Strategies /Activities	Week/ Meeting
STATISTICAL CONSULTING 1 1. Introduction to Statistical Consulting 1.1 History of the Scientific Method 1.2 The Development of Statistics	Lecture Class Discussion Problem Set	6 Hours

Topic/ Subtopic	Learning Strategies /Activities	Week/ Meeting
1.3 Overview of Statistical Consulting		
2. Communication 2.1 Verbal Interaction 2.2 How to Write Reports 2.3 How to Make Effective Presentations □□□ Importance of Quality Graphics□	Lecture Class Discussion Problem Set	6 Hours
3. Methodological Aspects 3.1 Data Collection 3.2 Data Processing 3.3 Statistical Issues 3.4 Statistical Methods Used in Consulting 3.5 Standard and General Methods 3.6 Design of Experiments □□□ Statistical Software□	Lecture Class Discussion Problem Set	6 Hours
4. A Consulting Project 4.1 Prior Information 4.2 Financial Issues 4.3 Session 1: The first meeting 4.4 Documentation 4.5 Project Analysis 4.6 Session 2: Presenting the Results 4.7 The Final Report	Lecture Class Discussion Problem Set	3 Hours
5. Case Studies		6 Hours

TEACHING STRATEGIES/METHODOLOGY

1. Lecture
2. Report
3. Case Studies

REQUIREMENTS OF THE COURSE

Statistical Consulting 1
1. Article Critique (2) 50%
2. Reporting 50%

Statistical Consulting 2
1. 2 Case Studies (Group) 50%
2. Oral Presentation 50%

Statistical Consulting 3
1. 5 Case Studies/Individual Project 50%
2. Oral Presentation 50%

TEXTBOOKS

- Cabrera, J. and A. McDougal. (2002). Statistical Consulting. NY: Springer.
- Chatfield, C. (1995). Problem Solving: A Statistician's Guide. London: Chapman & Hall.
- Derr, J. (2000). Statistical Consulting: A Guide to Effective Communication. Pacific Grove: Duxbury.
  Enders, W. (2010). Applied Econometric Time Series. Hoboken, N.J.: Wiley
- Everitt, B. and Hothorn, T. (2011). An introduction to applied multivariate analysis with R [electronic resource]. New York, NY; Springer New York.
- Fichet, B. (2011). Classification and multivariate

0116-7111, http://www.philjol.info/philjol/index.php/BER/article/view/1912).

- Beltrano, Elline Jade, Leong, Robert Neil F., and Co, Frumencio F. (2013). Regression Analyses of the Philippine Birth Weight Distribution. *The Philippine Statistician* (2), 31-52.
- Carandang, J. and Co, F. (2012). "Factors affecting the student evaluation ratings of Biology faculty at [illegible]