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.

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<thead>
<tr>
<th>Topic/ Subtopic</th>
<th>Learning Strategies /Activities</th>
<th>Week/ Meeting</th>
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<tbody>
<tr>
<td>STATISTICAL CONSULTING 1</td>
<td>Lecture Class Discussion Problem Set</td>
<td>6 Hours</td>
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<tr>
<td>1. Introduction to Statistical Consulting</td>
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<td>1.1 History of the Scientific Method</td>
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<td>1.2 The Development of Statistics</td>
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<td>Learning Strategies /Activities</td>
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<td>1.3 Overview of Statistical Consulting</td>
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<td>2. Communication</td>
<td>Lecture Class Discussion Problem Set</td>
<td>6 Hours</td>
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<td>2.1 Verbal Interaction</td>
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<td>2.2 How to Write Reports</td>
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<td>2.3 How to Make Effective Presentations</td>
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<td>2.4 Importance of Quality Graphics</td>
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<td>3. Methodological Aspects</td>
<td>Lecture Class Discussion Problem Set</td>
<td>6 Hours</td>
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<td>3.1 Data Collection</td>
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<td>3.2 Data Processing</td>
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<td>3.3 Statistical Issues</td>
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<td>3.4 Statistical Methods Used in Consulting</td>
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<td>3.5 Standard and General Methods</td>
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<td>3.6 Design of Experiments</td>
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<td>3.7 Statistical Software</td>
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<td>4. A Consulting Project</td>
<td>Lecture Class Discussion Problem Set</td>
<td>3 Hours</td>
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<td>4.1 Prior Information</td>
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<td>4.2 Financial Issues</td>
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<td>4.3 Session 1: The first meeting</td>
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<td>4.4 Documentation</td>
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<td>4.5 Project Analysis</td>
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<td>4.6 Session 2: Presenting the Results</td>
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<td>4.7 The Final Report</td>
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<td>5. Case Studies</td>
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<td>6 Hours</td>
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**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


REFERENCES

- Lock, R. WWW Resources in teaching Statistics: http://it.stlawu.edu/~rlock/tise98/onepage.html
- West, R. Regression Applet: http://www.stat.sc.edu/~west/javahtml/Regression.html
- DoE & Analysis of Experimental Data (using R): http://cran.r-project.org/web/views/ExperimentalDesign.html

FACULTY OUTPUT


Noted by:

Dr. Isagani B. Jos
Chair, Department of Mathematics

Dr. Jose Santos R. Carandang VI
Dean, College of Science