



**DE LA SALLE UNIVERSITY – MANILA**  
**COLLEGE OF SCIENCE**  
**Mathematics Department**

**SYLLABUS**

**COURSE CODE** MSS513M  
**COURSE TITLE** Introduction to the Theory of Statistical Inference  
**CLASS DAY & TIME**  
**ROOM**  
**NAME OF FACULTY**  
**COURSE CREDIT** 3 Units  
**CONTACT NO. (DEPT)** (02) 536-0270, (02) 524-4611 loc. 420/413  
**TERM/SCHOOL YEAR**

**COURSE DESCRIPTION**

A course on the theory of estimation and hypothesis testing.

**COURSE OBJECTIVES**

The students will:

1. properly define basic concepts and state well – known results in statistical inference;
  2. demonstrate ability to evaluate estimators and construct appropriate interval estimates and tests of hypotheses;
  3. show the capability of relating the theory of inference to real-world problems;
- cooperation through group study;  
honesty by claiming credit only for the work he has done;  
zeal and seriousness of intent to learn by participating actively in class discussion, doing his homework regularly and consulting his mentor;  
patience, perseverance and diligence by solving assigned exercises completely including the difficult ones;  
faith by doing what is right and giving his best in performing any assigned task;  
show concern for the community through sharing of know-how and resources during group discussion;  
self-reliance by being able to solve problems independently.

Topic/Subtopic	Learning Strategies/ Activities	Week/Meeting
<b>1. PROPERTIES OF A RANDOM SAMPLE</b> 1.2 Sampling from the Normal Distribution 1.3 Properties of the Sample Mean and Variance 1.4 The Derived Distributions: Student's t and Snedecor's F 1.5 Order Statistics 1.6 Convergence Concepts 1.7 Convergence in Probability 1.8 Almost Sure Convergence 1.9 Convergence in Distribution	Lecture-Discussions Problem Solving Hands-on Exercises	7 hrs



- Roussas, G. (1997). *A First Course in Mathematical Statistics, 2/e*. Academic Press.
- Young, G.A. and Smith, R.L. (2005). *Essentials of Statistical Inference*. Cambridge University Press.

Noted by:

A handwritten signature in black ink, appearing to read 'Isagani B. Jos', is written over a light blue rectangular background.

DR. ISAGANI B. JOS  
Chair, Mathematics Department

DR. JOSE SANTOS R. CARANDANG VI  
Dean, College of Science