

Report on Teachers' Orientation & Teaching Materials Preparation Program

Bachelor in Computer Science and Information Technology

(September 17 to 19, 2008)

Course Number: STAT 159

Course Title: Statistics II

List of participants:

We first reviewed the past orientation program. The review was focused upon the gap between what had been agreed upon during the last orientation program and what had been asked in the First Semester's Final Exam. The main conclusions of this review are

- There was not much gap in STAT 103.
- There was a huge gap in STAT 108. For example, agreed upon not to derive any formulae for Multistage sampling, but question was asked; Cluster sampling is not in STAT 108, but question was asked from Cluster sampling; 10% critical values of Man Whitney test are not available in all the books but asked to test at 10% level of significance.
- A minor comment was that questions were not asked from all the sub-units.

Based upon the past experience we decided to recommend the followings.

- Critical values of all the tests should provide by question setter in the question
- Derivation formula should not be taught and asked in STAT 108 for the following sampling methods – Stratified, Systematic, and Multistage – as well as Ratio and Regression Method of Estimation. Only the two main topics when and how these sampling methods are used should be taught with examples.
- The estimators of population mean, variance and proportion and their un-biasness property under Simple Random sampling (both with and without replacement) should be taught.

Orientation on STAT 159

Sampling Methods and Design and Analysis of Experiments are the two broad topics covered under the course STAT 159. One of the major problems in these topics is the notations, which change from one book to another and it may cause a big problem in the exam. In order to avoid this problem we agreed upon to follow the following text books with their notations while teaching the course.

- **Theory and Method of Survey Sampling by Parimal Mukhopadhyay**
- **Design and Analysis of Experiments by Douglas C.Montgomery**

But these texts cover more topics than the topics covered under the course STAT 159. We therefore agreed upon to cover certain sections or subsections of the texts, which are summarized in the followings.