



**UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION
FOR ASIA AND THE PACIFIC (ESCAP)
STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC (SIAP)**

Course Information Note

e-learning course on Price Statistics

A. Introduction

The e-learning course on price statistics is the first in the series that the United Nations Statistical Institute for Asia and the Pacific (SIAP) intends to offer for years to come. It is part of a wider training programme on economic statistics with the focus being supporting countries implement the 2008 System of National Accounts (2008 SNA). It also contributes to the implementation of the Regional Programme for Economic Statistics (RPES) that is being implemented by the United Nations Economic Commission for Asia and the Pacific (ESCAP). The RPES identified a number of core set economic statistics that all countries should strive to produce which includes price statistics. Implementation of the RPES includes delivery of specialised training on different topics under the core set of the economic statistics under the RPES.

The course introduces the principles of measuring prices and the different valuations associated with price measurement. This is extended to introduce the theory of price indices and why we use price indices. It progressively lays out key considerations involved in the construction of a price index with respect to what is expected to be measured. It gives insights to choices that need to be made over formulas and how such choices relate to the objective of the price index under measurement. Other aspects of price indices dealt with in this online course include use of classifications to describe the issues involved in price collection; procedures for aggregating price indices, quality adjustment and sources of bias including mitigating measures.

This Price Statistics is the first online course being delivered by SIAP is also expected to contribute to the implementation of the 2008 SNA through improved skills to apply best practices in rebasing the national accounts. Participants involved in the collection of price

statistics, price index collection and national accounts compilers will find this course useful in understanding key issues that affect the quality of price indices. Officers involved in the design of economic surveys as well as general data collection of related economic statistics including users of price statistics will find this course quite valuable.

B. Course Objectives & Expected Learning Outcomes

The course is designed with the following objectives:

1. To introduce principles of measuring prices and the different valuations associated with price measurement;
2. To explain the theory of price indices and practical use of price indices;
3. To discuss price collection procedures, index compilation and data quality control measures.

At the end of the course, participants are expected to be able to:

1. Apply different techniques in the compilation of price indices with respect to the objectives of the index under calculation;
2. Design a price index compilation system that is representative and addresses data quality issues.

C. Contents of the Course

Topic	Contents
1. Introduction to Price Statistics	(i) Price indices as a tool (ii) Concept of price index and its uses (iii) Principles of a price index
2. Constructing a Price Index	(i) Measuring price change by pricing a fixed basket over time (ii) Practical calculation of price indices (iii) Comparisons between different forms of price indices (iv) Price indices for three or more periods (v) Equal weighted price indices
3. Price Collection and Aggregation	(i) Classification and price indices (ii) Aggregation of price indices (iii) Sampling for price indices (iv) Price collection
4. Practical Issues, Bias and Quality	(i) The concept of quality (ii) Biases in price indices (iii) Modifying price baskets

D. Delivery of Course and Course Materials

The course has been designed to be completed in four weeks. Participants are expected to complete two lessons each week.

For each lesson, the course materials consist of:

- Notes for reading, called *Reading Material* specific to each lesson
- Online presentations with embedded quizzes and;
- Assignments.

Lesson materials will be made available on a staggered basis to help learners to follow the required sequence in mastering the material and achieving the learning outcomes. After completion of each lesson, the participants are required to take an on-line lesson completion test. Participants will be able to proceed to the next lesson only if they pass the completion test of the preceding lesson. This test will be based on the materials provided and reference materials that participants are expected to read.

The course will be delivered using online presentations. In addition to the presentation slides, participants are expected to read the accompanying reference materials. Instructors will open discussion forums and participants are expected to actively participate in these forums.

E. Assessments

Trainee performance will be assessed through the following:

- Quizzes
- Lesson completion test
- Assignments
- Participation in discussion forums
- Final test

In addition to taking the required tests after completion of each lesson, all the participants are required to complete the assignments. Assignments and lesson completion tests are designed to prepare participants for the final test.

A final test will be administered at the end of course. The final grade will take into account the results of: lesson completion tests, quizzes, participation in discussion forums and the final test. A final grade of at least **70%** is needed to obtain a certificate of successful completion of the course.

F. Certificate of Successful Completion

Certificates will be awarded through the system. *To be able to download the certificate, the participants have to pass the course, fill and submit a course evaluation form.*