

**COURSE SYLLABUS**  
**FOR FULL-TIME UNDERGRADUATE PROGRAMS**

*(Issued under Decision No.1380/QĐ-ĐHKTQĐ on 15/8/2016 by the University President)*

**1. COURSE NAME: ECONOMIC STATISTICS**

Code: TKKT1109

Number of Credits: 02

**2. DEPARTMENT IN CHARGE OF INSTRUCTION:**

*Socio-Economic Statistics*

**Office:** Room 401-402, Building No 7, NEU

**Office Hours:** 8:00 – 17:00, from Monday to Friday

**Office Telephone:** 04.38693275

**3. PRE-REQUISITE:**

Economics (Microeconomics and Macroeconomics)

**4. COURSE DESCRIPTION:**

The course studies the methodology to build up and calculate the economic indicator system as well as the process of social reproduction in the whole economy. It presents production activities in the economy, from inputs to outputs, the production efficiency,...; the interaction among them and the connection between domestic economy and the rest of the world.

Economic statistics is not only a main course for students majoring in statistics but also a basic course for other majors in economics and business management field. This course has a direct and tight relationship with other courses in economics, economic management, finance, economic mathematics. It is also considered as the foundation course for statistical analysis, econometrics and economic forecasting.

**5. COURSE OBJECTIVES:**

The course provides students with a general and detailed picture of the national economy by using quantitative indicator system. In order to do so, students will receive appropriate training including the basic ideas of the indicators' meaning, the methods to calculate and analyze each indicator as well as the sources where related data should be exploited and collected. The course also brings to students methodology to build up and analyze macroeconomic models through SNA, to forecast and make planning for the economy. In addition, students are expected to fully acknowledge about the international comparison indicator system.

## 6. COURSE CONTENT:

### TENTATIVE SCHEDULE

<i>No</i>	<i>Contents</i>	<i>Total hours</i>	<i>In details</i>		<i>Notes</i>
			<i>Theory</i>	<i>Practice, Discussion, Exams</i>	
1	Chapter 1	4	3	1	
2	Chapter 2	4	3	1	
3	Chapter 3	5	3	2	
4	Chapter 4	4	3	1	
5	Chapter 5	3	2	1	
6	Chapter 6	5	3	2	
7	Chapter 7	4	3	1	
8	Midterm exam	1	-	1	
	<b>Total</b>	<b>30</b>	<b>20</b>	<b>10</b>	

### CHAPTER 1 – INTRODUCTION TO ECONOMIC STATISTICS

Economic statistics provides necessary, timely, accurate information in managing and monitoring the economy. The more developed the economy is, the greater the demand for socio-economic information is. It is, indeed, the base for making decisions about managing and guiding the economy as well as determining policies for socio-economic development. Therefore, economic statistics, a required part of statistical science, has become more and more essential and practical in the economy.

Chapter 1 introduces general contents of economic statistics, including: objective of the course, roles and methodology of research; key indicator system; data sources; system of national accounts overview; main classifications in economic statistics. These are the foundation for the following chapters, which will measure in detail the operation of the economy.

#### 1.1 What is economic statistics?

#### 1.2 Key indicator system

#### 1.3 Data sources

#### 1.4 Introduction to System of National Accounts

##### 1.4.1. Overview of SNA

##### 1.4.2. SNA and its roles

##### 1.4.3. Some basic concepts

#### 1.5 Main classifications in economic statistics

##### 1.5.1. Classification of institutional sectors

##### 1.5.2. Industrial classification of all economic activities

##### 1.5.3. Other classifications

***Texts and readings for the chapter:***

1. Phan Cong Nghia, Bui Duc Trieu (2012), Economic Statistics, text book, National Economics Publishing House.
2. Nguyen Van Quy (2000), The system of national accounts, Statistical Publishing House.
3. GSO (2003), SNA compilation method in Vietnam, Statistical Publishing House.
4. GSO (2007), Vietnam Standard Industrial Classification of All Economic Activities (VSIC).
5. GSO (2010), Central Product Classification (CPC) in Vietam, Statistical Publishing House.
6. System of National Accounts 1993 UN, IMF, WB -1993,2008.
7. А. В. Сиденко, Б. И. Башкатов, В. М. Матвеева (1999). Международная статистика - Учебник - Москва ``Дело и Сервис``.
8. Б. И. Башкатова и др (2002). Национальное счетоводство - Учебник - Москва ``Финансы и Статистика``.
9. Г. Д. Кулагиной и др (1997). Национальное счетоводство - Учебник - Москва ``Финансы и Статистика``.
10. Ю. Н. Иванова (2006). Экономическая Статистика - Учебник – МГУ-Москва ``ИНФРА-М``.

## **CHAPTER 2 – PRODUCTION RESOURCES STATISTICS**

Production is the process to transform inputs into outputs. The chapter mentions three primary production inputs including labours, capital and assets. As labour is a part of the population and the production outputs finally to serve the population, it is necessary to attach both population statistics and labour statistics. Furthermore, capital and assets are economic resources of production. On the whole economy, the two factors are called national wealth. Chapter 2 presents in details the above-mentioned resources.

### **2.1. Population**

- 2.1.1. Population size and structure
- 2.1.2. Population change
- 2.1.3. Population forecast

### **2.2. Labour**

- 2.2.1. Employment and unemployment
- 2.2.2. Labour size and structure
- 2.2.3. Labour change
- 2.2.4. Labour resources

### **2.3. National wealth**

- 2.3.1. Concept and classification
- 2.3.2. Fixed assets
- 2.3.3. Investment

***Texts and readings for the chapter:***

1. Phan Cong Nghia, Bui Duc Trieu (2012), Economic Statistics, text book, National Economics Publishing House.
2. Pham Dai Dong (2007), Demographic statistics, text book, National Economics Publishing House.
3. Nguyen Van Quy (2000), System of National Accounts, Statistical Publishing House.
4. Bui Duc Trieu (2001), National Wealth Statistics via the System of National Accounts (SNA), Journal of Economics and Development, No.47, p.47-49.
5. GSO, Statistical Yearbook of Vietnam, Statistical Publishing House
6. System of National Accounts 1993 UN, IMF, WB -1993,2008.
7. А. В. Сиденко, Б. И. Башкатов, В. М. Матвеева (1999). Международная статистика - Учебник - Москва ``Дело и Сервис``.
8. И. И. Елисеева и др (2001). Социальная Статистика - Учебник - Москва ``Финансы и Статистика``
9. Б. И. Башкатова и др (2002). Национальное счетоводство - Учебник - Москва ``Финансы и Статистика``.
10. Г. Д. Кулагиной и др (1997). Национальное счетоводство - Учебник - Москва ``Финансы и Статистика``.
11. Ю. Н. Иванова (2006). Экономическая Статистика - Учебник – МГУ-Москва ``ИНФРА-М``.

### **CHAPTER 3. STATISTICS OF PRODUCTION OUTPUTS**

In the economy, production results are reflected by an indicator system including aggregated economic indicators such as gross output (GO), gross domestic product (GDP),... Of which, GO is the indicator reflecting the value of products, having highly aggregated and being the basis for calculating other indicators. However, GO has the disadvantage of being double counting. So, it is essential to eliminate the double counting element called intermediate cost (IC) from GO in order to measure net results and growth rate of the economy. Therefore, the indicator system introduces two indicators including the value added (VA) for enterprises, sectors and the gross domestic product (GDP) for the whole economy. Chapter 3 presents methods of identifying, calculating and analysing the above-mentioned indicators.

#### **3.1. Gross output**

- 3.1.1. Classification and measurement of outputs
- 3.1.2. Definition and principles of gross output measurement
- 3.1.3. Measurement of gross output

#### **3.2. Gross domestic product**

- 3.2.1. Intermediate consumption
- 3.2.2. Value added
- 3.2.3. Gross domestic product

### **3.3. Methods of analyzing production outputs**

#### ***Texts and readings for the chapter:***

1. Phan Cong Nghia, Bui Duc Trieu (2012), Economic Statistics, text book, National Economics Publishing House.
2. GSO, Statistical Yearbook of Vietnam, Statistical Publishing House
3. System of National Accounts 1993 UN, IMF, WB -1993,2008
4. N. Gregory Mankiw (1999), Macroeconomics, Statistical Publishing House
5. А. В. Сиденко, Б. И. Башкатов, В. М. Матвеева (1999). Международная статистика - Учебник - Москва ``Дело и Сервис``
6. Г. Д. Кулагиной и др (1997). Национальное счетоводство - Учебник - Москва ``Финансы и Статистика``
7. Ю. Н. Иванова (2006). Экономическая Статистика - Учебник – МГУ-Москва``ИНФРА-М``

## **CHAPTER 4 – INPUT-OUTPUT TABLE**

Input - output table has established and developed in the needs of macroeconomic aggregation and analysis. Wassily Leontief built the I-O table based on previous studies by economists such as F. Quesnay, Karl Marx, Leon Walras, Cobb-Douglas, Harrod-Domar, J. Keynes,... He modeled economic activities in a table reflecting the production process of the whole economy on the principles of balance between input and output. Since his publication in 1936, I-O has been applied worldwide in analysing economic activities of the economy. It has become the center of Economic Statistics and the System of National Accounts. Chapter 4 presents the I-O table and methods of analysing.

### **4.1. Roles of the input-output table**

### **4.2. Structure of the input-output table**

### **4. 3. Methods of analyzing the input-output table**

#### ***Texts and readings for the chapter:***

1. Phan Cong Nghia and Bui Duc Trieu (2012), Economic Statistics, text book, National Economics Publishing House.
2. Bui Trinh et al (2001), Input-Output model and some applications in economic and environmental analysis and forecasting, Statistical Publishing House
3. Nguyen Van Quy (2000), System of National Accounts, Statistical Publishing House.
4. GSO, Statistical Yearbook of Vietnam, Statistical Publishing House
5. GSO (2003), SNA compilation method in Vietnam, Statistical Publishing House
6. GSO (2010), Input-Output table in Vietnam 2007, Statistical Publishing House
7. System of National Accounts 1993 UN, IMF, WB -1993, 2008

8. А. В. Сиденко, Б. И. Башкатов, В. М. Матвеева (1999). Международная статистика - Учебник - Москва ``Дело и Сервис``
9. Г. Д. Кулагиной и др (1997). Национальное счетоводство - Учебник - Москва ``Финансы и Статистика``
10. Ю. Н. Иванова (2006). Экономическая Статистика - Учебник – МГУ-Москва ``ИНФРА-М``

## **CHAPTER 5 – PRODUCTIVITY STATISTICS**

In terms of economics, productivity reflects the efficiency of production. It can be expressed as the ratio of output to inputs used in the production process, i.e. output per unit of input. This chapter introduces general principles and key indicator system of productivity.

### **5.1. Definition and methodology**

5.1.1. Definition

5.1.2. Methodology

### **5.2. Key indicator system**

5.2.1. Indicators on regular cost productivity

5.2.2. Indicators on resource productivity

5.2.3. Indicators on total cost productivity

5.2.4. Indicators on other productivity

#### ***Texts and readings for the chapter:***

1. Phan Cong Nghia and Bui Duc Trieu (2012), Economic Statistics, National Economics Publishing House
2. Pham Ngoc Kiem, Nguyen Cong Nhu, Bui Duc Trieu (2009), Statistics in Enterprises, text book, Statistical Publishing House.
3. Tang Van Khien (2005), TFT growth rate: calculation methods and applications, Statistical Publishing House.
4. GSO, Statistical Yearbook of Vietnam, Statistical Publishing House
5. Van Tinh-Le Hoa (2003), Measuring productivity in enterprises, World Publisher.
6. Institute of Statistical Science (2005), Some issues of statistical methodology, Statistical Publishing House.
7. Ю. Н. Иванова (2006). Экономическая Статистика - Учебник – МГУ-Москва ``ИНФРА-М``

## **CHAPTER 6 – FINANCIAL STATISTICS**

Financial statistics studies the behavior of financial resources, monetary and credits in the economy. It covers economic phenomena and economic relations in the form of monetary through stages of production, distribution, redistribution, consumption and accumulation. Chapter 6 introduces some general principles and major financial indicators.

### **6.1. General principles of financial statistics**

### **6.1.1. Subjects, roles and methodology**

### **6.1.2. Major indicators**

## **6.2. State budget**

6.2.1. State budget revenue – expenditure and funding

6.2.2. Off-budget funds

## **6.3. Price**

6.3.1. Types of price

6.3.2. Price index

## **6.4. Credit**

6.4.1. Concepts and classification

6.4.2. Supply and use of credit

### ***Texts and readings for the chapter:***

1. Phan Cong Nghia and Bui Duc Trieu (2012), Economic Statistics, National Economics Publishing House
2. Bui Duc Trieu (2006), Financial statistics in the market economy, Journal of Economics and Development, No.9/2006, p.46-47
3. Duong Thanh Dung, Nguyen Thi Thanh Huong (2002), Banking Statistics, Statistical Publishing House
4. Nguyen Huu Tai (2007), Monetary and Financial Theories, National Economics Publishing House.
5. Nguyen Van Ngoc (2005), Macroeconomic Theories, Labour and Social Publishing House.
6. State budget law and the budget index system 2006, Labour and Social Publishing House
7. GSO, Statistical Yearbook of Vietnam, Statistical Publishing House
8. Monetary and Financial Statistics Manuel - IMF-2000- [www.imf.org](http://www.imf.org)
9. В. Н. Салина (2002). Статистика Финансов - Учебник - Москва ``Финансы и Статистика``
10. Ю. Н. Иванова (2006). Экономическая Статистика - Учебник – МГУ-Москва ``ИНФРА-М``

## **CHAPTER 7 – LIVING STANDARDS STATISTICS**

Living standard includes factors of physical and spiritual demands such as income, quality and availability of employment, poverty rate, gross domestic product, inflation rate, amount of leisure time every year, affordable (or free) access to quality healthcare, quality and availability of education, life expectancy,.. These demands are very difficult to quantify as they always change over time and vary in space. Chapter 7 builds up, collects and analyze the living standards indicator system to assess the quality of living results.

### **7.1. Concepts and key indicator system**

7.1.1. Concepts

7.1.2. Key indicator system

## **7.2. Living condition statistics**

7.2.1. Housing, infrastructure and services

7.2.2. Emission and pollution

7.2.3. Policies and habitat control measures

## **7.3. Methods of analyzing living standards**

7.3.1. Some indices

7.3.2. Methods of analyzing living standards

### ***Texts and readings for the chapter:***

1. Phan Cong Nghia and Bui Duc Trieu (2012), Economic Statistics, National Economics Publishing House
2. GSO, Statistical Yearbook of Vietnam, Statistical Publishing House
3. GSO (2010), Result of the survey on household living standards 2008, Statistical Publishing House
4. UNDP-GSO (2001), Living standards during an economic boom, Statistical Publishing House
5. И. И. Елисеева и др (2001). Социальная Статистика - Учебник - Москва ``Финансы и Статистика``
6. Ю. Н. Иванова (2006). Экономическая Статистика - Учебник – МГУ-Москва ``ИНФРА-М``

## **7. REQUIRED TEXTBOOKS & COURSE MATERIALS:**

Phan Cong Nghia and Bui Duc Trieu (2012), Economic Statistics, National Economics Publishing House.

## **8. RECOMMENDED TEXTS & OTHER READINGS:**

1. Bui Duc Trieu (2001), National Wealth Statistics via the System of National Accounts (SNA), Journal of Economics and Development, No.47, p.47-49
2. Bui Duc Trieu (2006), Financial statistics in the market economy, Journal of Economics and Development, No.9/2006, p.46-47
3. Bui Trinh et al (2001), Input-Output model and some applications in economic and environmental analysis and forecasting, Statistical Publishing House
4. Duong Thanh Dung, Nguyen Thi Thanh Huong (2002), Banking Statistics, Statistical Publishing House.
5. Nguyen Huu Tai (2007), Monetary and Financial Theories, National Economics Publishing House
6. Nguyen Van Ngoc (2005), Macroeconomic Theories, Labour and Social Publishing House
7. Nguyen Van Quy (2000), System of National Accounts, Statistical Publishing House
8. Pham Dai Dong (2007), Demographic statistics, text book, National Economics Publishing House



9. Tang Van Khien (2005), TFT growth rate: calculation methods and applications, Statistical Publishing House
10. State budget law and the budget index system 2006, Labour and Social Publishing House
11. GSO, Statistical Yearbook of Vietnam, Statistical Publishing House
12. GSO (2003), SNA compilation method in Vietnam, Statistical Publishing House
13. GSO (2007), Vietnam Standard Industrial Classification of All Economic Activities (VSIC)
14. GSO (2010), Input-Output table in Vietnam 2007, Statistical Publishing House
15. GSO (2010), Result of the survey on household living standards 2008, Statistical Publishing House
16. UNDP-GSO (2001), Living standards during an economic boom, Statistical Publishing House
17. UNDP-GSO (2007), Survey on Vietnamese households 2000 – 2010, Statistical Publishing House
18. UNDP-GSO (2011), The national statistical indicator system, Statistical Publishing House
19. Van Tinh-Le Hoa (2003), Measuring productivity in enterprises, World Publisher.
20. Institute of Statistical Science (2005), Some issues of statistical methodology, Statistical Publishing House
21. Monetary and Financial Statistics Manuel - IMF-2000- [www.imf.org](http://www.imf.org)
22. N. Gregory Mankiw (1999), Macroeconomics, Statistical Publishing House
23. System of National Accounts 1993 UN, IMF, WB -1993,2008
24. Б. И. Башкатова и др (2002). Национальное счетоводство - Учебник - Москва ``Финансы и Статистика``
25. В. Г. Долженкова (2000). Статистика цен - Учебное пособие - Издательство ``Филинь``
26. В. Е. Адамов (1977). Факторный индексный анализ - Москва ``Статистика``
27. В. Н. Салина (2002). Статистика Финансов - Учебник - Москва ``Финансы и Статистика``
28. Г. Д. Кулагиной и др (1997). Национальное счетоводство - Учебник - Москва ``Финансы и Статистика``
29. И. И. Елисеева и др (2001). Социальная Статистика - Учебник - Москва ``Финансы и Статистика``
30. Р. А. Шмойлова и др (2008). Теория Статистика - Учебник - Москва ``Финансы и Статистика``
31. Ю. Н. Иванова (2006). Экономическая Статистика - Учебник – МГУ- Москва ``ИНФРА-М``

## **9. ASSESSMENT & GRADING POLICY:**

The assessment and grading policy complies with the current regulations of the National Economics University. Specifically:

- Class attendance: 10%
- Mid-term exam: 30%
- Final exam: 60%

(To be eligible for final exam, students need to achieve minimum scores of 5 and 3 for attending class and mid-term exam, respectively)

*Hanoi, 2016*

**HEAD OF DEPARTMENT**

**PRESIDENT**

(signed)

(signed)

**MSc. Nguyen Thi Xuan Mai**

**Prof.Dr. Tran Tho Dat**