

**MGIMO University**  
**School of Government and International Affairs**

**Statistics**

Undergraduate Course Syllabus

Instructor  
Prof. Marina D. Simonova

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This syllabus is designed in accordance with the MGIMO Educational Standard for the Bachelor Program «Government and International Relations»

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Director MGIMO Library \_\_\_\_\_ Marina Reshetnikova

**PART 1:**  
**INSTRUCTOR INFORMATION, COURSE DESCRIPTION**  
**AND TEACHING METHODS**

**1.1 General information**

- Full course title: Statistics
- Type of course: Compulsory
- Level of course: B.A.
- Year of study: 1<sup>st</sup>
- Number of ECTS credits allocated: 2
- Name of lecturer and office hours:

Dr. M. D. Simonova

Professor, Department of Accounting, statistics and auditing

Office hours: Thursday 1PM-4PM, office 3020

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**1.2 Course aims and learning outcomes**

The **aims** of the course are:

- I. to provide students with foundational knowledge and sound understanding of social and economic development process;
- II. to introduce students to statistical methods of calculating;
- III. to orient students to self-dependent computing and economic analysis;
- IV. to provide students with understanding of international statistical standards and indicators.

**Learning outcomes:**

By the end of this course students should be able to:

- recognize and describe data;
- calculate the measures of time series;
- display, make presentations and interpret tabular data;
- display data graphically and interpret graphs;
- calculate and analyze system of economic index numbers;
- interpret, analyze and identify trends in population number and structure;
- interpret, analyze and identify trends in labour force statistical variables and time series;
- interpret, identify trends in macroeconomic indicators, deflator variables and time series;
- analyze gross domestic product, gross national income information;

- interpret, identify trends and analyze international trade in goods and services time series.

### **1.3 Course requirements and grading plan**

#### **Course requirements**

Students will be required to attend not less than 90% of classes and be prepared for class. Conscientious reading of the assigned materials and accomplishing tasks is compulsory.

#### **Teaching Methodology**

Our classes will be interactive and participatory, which means that you are expected to read the reading materials in advance in order to participate in class calculations and discussions. I will guide you through the readings and the topic of the class. However, do not expect your instructor to solely lecture you on the subject matter. As a part of learning exercise, you all have to contribute to discussions with your ideas and opinions, and therefore please DO come to the class ready, by having read the class material, doing exercises in written form. Please note that 15% of your overall grade depends on your participation in discussions.

#### **Grading plan**

- Class participation – 15%
- Students are expected to attend all the lectures seminars and participate in class discussions; since the course is highly interactive, it is essential that students attend the seminars having read the materials and having learned formula for the day's class.
- In-class tests – 15%
- Students will write three tests during the semester. Dates of test classes are defined by the instructor and communicated to the students at the first class of the respective course.
- Response papers – 10%.
- The students are expected to submit response papers to the readings at least one day before the seminar class. Such papers are to include descriptions of the reading's main points and to accomplish tasks. Response papers help substantially to improve the discussion quality at seminars.
- Final test – 60% .

#### **Classroom decorum/Some Rules & Expectations**

- If you need to leave early, notify me prior the class and sit closer to the door.
- I may communicate with you via e-mail. You are responsible to check that your email address on file with the university is the address you are using regularly.

- Please do not be late to the class. I can excuse your being late for about 10 minutes once or may be twice. But if it takes a certain pattern I have the right not to let you in the class and consider you absent from it.
- I will not accept late excuses for absences without prior notice.
- Late submissions would be marked down 10% of overall grade for each day.

### **Academic Honor Code**

Academic dishonesty includes, but is not limited to, the following:

**Cheating:** The act of deception by which a student who misrepresents mastery of information on an academic exercise. These acts can be either premeditated or not.

**Plagiarism:** The unacknowledged inclusion of someone else's actual words or paraphrases, ideas or data as one's own. This means that sources of information must be appropriately cited with footnotes or quotation marks and identified, whether published or unpublished, copyrighted or uncopyrighted.

**Academic Misconduct:** The actual or attempted tampering or misuse of academic records or materials such as transcripts and examinations.

**Falsification/Fabrication:** The intentional use of false information or the falsification of research, findings, personal or university documents with the intent to deceive.

**Accessory to Acts of Academic Dishonesty:** The act of facilitating, supporting or conspiring with another student to commit or attempt to commit any form of academic dishonesty

## PART 2. COURSE CONTENT

### 2.1 Types of work

Types of work	Academic hours
<b>Total</b>	<b>84</b>
Total for lectures, seminars and written exam	<b>32</b>
Lectures	8
Seminars	24
Written tests and exam	<b>10</b>
<b>Homework</b>	<b>42</b>
Written and oral home assignments	22
Preparation for lectures, seminars and written exam	20

### 2.2 Course content and readings by topic

#### Topic 1. DESCRIPTIVE STATISTICS

##### Lecture 1.1. Descriptive statistics: System of variables

Summary: Data and statistics. Statistics as the science of collecting, analyzing, presenting, and interpreting data. Elements, Variables, Observations. Scales of Measurement. Time series. Qualitative and Quantitative Data. Tabular and graphical presentations. Summarizing quantitative data. Grouped Data.

##### Seminar 1.1. Descriptive statistics: System of variables

###### Compulsory readings:

Hardle W.K, Klinke S., Ronz B. Introduction to Statistics: Using Interactive MM\*Stat Elements / Wolfgang Karl Hardle, Sigbert Klinke, Bernd Ronz. – Berlin: Springer, 2015. Chapter 1. Pp. 1-16

###### Further readings:

— Anderson D., Sweeney D., Williams Th. Statistics for Business and Economics. Cengage Publishing, 2011. Chapter 1. : 1.1, 1.2, 1.3.

###### Internet resources:

- <http://www.oecd.org/statistics/statisticalresources.htm>
- <http://unstats.un.org/unsd/mbs/app/DataSearchTable.aspx>
- [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)

- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Europe\\_in\\_figures\\_-\\_Eurostat\\_yearbook](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Europe_in_figures_-_Eurostat_yearbook)
- Gks.ru

## **Seminar 1.2. Descriptive statistics: Time series**

### Compulsory readings:

- Hardle W.K, Klinke S., Ronz B. Introduction to Statistics: Using Interactive MM\*Stat Elements / Wolfgang Karl Hardle, Sigbert Klinke, Bernd Ronz. – Berlin: Springer, 2015. Chapter 1. Pp. 1-20, 477-479.

- Anderson D., Sweeney D., Williams Th. Statistics for Business and Economics. Cengage Publishing, 2011. Chapter 1.: 1.3.-1.6

### Further readings:

— Статистика: учебник для вузов / под ред. И.И. Елисеевой. - Москва : Проспект, 2014. - 448 с.

### Internet resources:

- <http://www.oecd.org/statistics/statisticalresources.htm>
- <http://unstats.un.org/unsd/mbs/app/DataSearchTable.aspx>
- [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)
- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Europe\\_in\\_figures\\_-\\_Eurostat\\_yearbook](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Europe_in_figures_-_Eurostat_yearbook)

## **Lecture 1.2. Descriptive statistics: Time series analysis. Mean. Index numbers.**

Summary: Mean. Weighted mean. UN methodology in Index numbers: price, unit value, volume. Base-weighted or a current-weighted index: Paasche, Laspeyres.

## **Seminar 1.3. Descriptive statistics: Time series analysis. Mean. Index numbers.**

### Compulsory readings:

— O'zdemir D. Applied Statistics for Economics and Business. Second Edition Durmus, O'zdemir //Yasar University. Izmir, Turkey. 2016. Chapter 5. Pp. 73-92.

— Giovannini E. Understanding Economic Statistics: An OECD Perspective. cOECD, 2008.

### Further readings:

- Статистика: учебник для вузов / под ред. И.И. Елисейевой. - Москва : Проспект, 2014. - 448 с.
- Anderson D., Sweeney D., Williams Th. Statistics for Business and Economics. Cengage Publishing, 7-th Ed. Chapter 17.
- Studies in methods. Series F No.1. Index numbers of industrial production. Statistical office of the UN Department of economic and social affairs. United Nations. New York.
- Statistical Papers Series F—No. 86. National Practices in Compilation and Dissemination of External Trade Index Numbers. A Technical Report. UN Department of Economic and Social Affairs. Statistics Division

### Internet resources:

- <http://www.oecd.org/statistics/statisticalresources.htm>
- <http://unstats.un.org/unsd/mbs/app/DataSearchTable.aspx>
- [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)
- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Europe\\_in\\_figures\\_-\\_Eurostat\\_yearbook](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Europe_in_figures_-_Eurostat_yearbook)
- Gks.ru

## **Topic 2. SOCIAL STATISTICS**

### **Lecture 2.1. Social statistics. Demography**

Summary: Primary source of data. Geographical coverage. Territorial composition. Comparability over time. International comparability. Total population. Age distribution. Statistics of live birth, death, foetal death, marriage and divorce.

### **Seminar 2.1. Social statistics. Demography**

#### Compulsory readings:

- Giovannini E. Understanding Economic Statistics: An OECD Perspective. OECD, 2008.
- Lequiller F., Blades D. (2014) Understanding National Accounts: Second edition. OECD Publishing.

#### Further readings:

- Статистика: учебник для вузов / под ред. И.И. Елисейевой. - Москва : Проспект, 2014. - 448 с.



- Handbook on Population and Housing Census Editing, Revision 1 / United Nations, Department of Economic and Social Affairs, Statistics Division. - [http://unstats.un.org/unsd/publication/SeriesF/seriesf\\_82rev1e.pdf](http://unstats.un.org/unsd/publication/SeriesF/seriesf_82rev1e.pdf)
- Handbook on the Management of Population and Housing Censuses [https://unstats.un.org/unsd/publication/seriesF/Series\\_F83Rev2en.pdf](https://unstats.un.org/unsd/publication/seriesF/Series_F83Rev2en.pdf)
- United Nations Demographic Yearbook. 2021. N-Y., UN.
- OECD Factbook 2021: Economic, Environmental and Social Statistics, OECD 2021.
- Revision of the European Standard Population Report of Eurostat's task force [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-30-12-128/EN/KS-30-12-128-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-30-12-128/EN/KS-30-12-128-EN.PDF)

#### Internet resources:

- [http://unstats.un.org/unsd/demographic/sources/census/2010\\_PHC/default.htm](http://unstats.un.org/unsd/demographic/sources/census/2010_PHC/default.htm)
- [http://unstats.un.org/unsd/demographic/products/dyb/dyb2006/Introduction\\_E.pdf](http://unstats.un.org/unsd/demographic/products/dyb/dyb2006/Introduction_E.pdf)
- <http://unstats.un.org/unsd/demographic/default.htm>
- [http://www.oecd-ilibrary.org/employment/employment-and-labour-markets-key-tables-from-oecd\\_20752342](http://www.oecd-ilibrary.org/employment/employment-and-labour-markets-key-tables-from-oecd_20752342)
- <http://www.oecd.org/statistics/>
- [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)
- <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tps00001&tableSelection=1&footnotes=yes&labeling=labels&plugin=1>
- [http://epp.eurostat.ec.europa.eu/portal/page/portal/product\\_details/publication?p\\_product\\_code=KS-RA-12-025](http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-RA-12-025)
- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Europe\\_in\\_figures\\_-\\_Eurostat\\_yearbook](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Europe_in_figures_-_Eurostat_yearbook)
- [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-30-12-128/EN/KS-30-12-128-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-30-12-128/EN/KS-30-12-128-EN.PDF)
- Gks.ru

## **Lecture 2.2. Social statistics. Labour force**

*Summary:* International Labour Organization, Regulation 1372/2007. Economically active population. Resident population of working age. Employment and unemployment. Persons employed, unemployed. Economically inactive persons. Labour market.

## **Seminar 2.2. Social statistics. Labour force**

### Compulsory readings:

- Understanding Economic Statistics. An OECD perspective. Enrico Giovannini. OECD. 2008. 4.8.
- Lequiller F., Blades D. (2014) Understanding National Accounts: Second edition. OECD Publishing.

### Further readings:

- EU labour force survey – main features and legal basis. <http://epp.eurostat.ec.europa.eu>
- OECD Factbook 2021: Economic, Environmental and Social Statistics. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/oecd-factbook\\_18147364](http://www.oecd-ilibrary.org/economics/oecd-factbook_18147364)
- Статистика : учебник для вузов / под ред. И.И. Елисеевой. - Москва : Проспект, 2018. - 448 с.

### Internet resources:

- <http://unstats.un.org/unsd/demographic/sources/surveys/default.htm>
- [http://www.oecd-ilibrary.org/employment/employment-and-labour-markets-key-tables-from-oecd\\_20752342](http://www.oecd-ilibrary.org/employment/employment-and-labour-markets-key-tables-from-oecd_20752342)
- [http://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-social-and-welfare-statistics\\_socwel-data-en](http://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-social-and-welfare-statistics_socwel-data-en)
- <http://www.oecd.org/statistics/>
- [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)
- <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tsdec420&tableSelection=3&footnotes=yes&labeling=labels&plugin=1>
- <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=teilm020&tableSelection=1&plugin=1>
- [http://epp.eurostat.ec.europa.eu/portal/page/portal/product\\_details/publication?p\\_product\\_code=KS-RA-12-025](http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-RA-12-025)
- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Europe\\_in\\_figures\\_-\\_Eurostat\\_yearbook](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Europe_in_figures_-_Eurostat_yearbook)
- Gks.ru

## **Topic 3. SYSTEM OF NATIONAL ACCOUNTS**

### **Lecture 3.1. System of national accounts: main concepts**

*Summary:* System of national accounts. Economic territory, residents, production boundary. Taxes and subsidies. Institutional sectors. Industries. ISIC - 4. Gross Value Added. Macroeconomic indicators' analysis.

MEI. Compensation of employees, Gross operating surplus. Final consumption expenditure. Gross Capital formation. Capital Transfers.

### **Seminar 3.1. System of national accounts: main concepts**

#### Compulsory readings:

- Lequiller F., Blades D. (2014) Understanding National Accounts: Second edition. OECD Publishing.

#### Further readings:

- Статистика : учебник для вузов / под ред. И.И. Елисейевой. - Москва : Проспект, 2014. - 448 с.
- National Accounts of OECD Countries. Volume 2014 Issue 1: Main Aggregates. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries-volume-2013-issue-1\\_na\\_ma\\_dt-v2013-1-en](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries-volume-2013-issue-1_na_ma_dt-v2013-1-en)
- National Accounts of OECD Countries, Volume 2014 Issue 2: Detailed Tables. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries\\_2221433x](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries_2221433x)
- OECD Factbook 2017: Economic, Environmental and Social Statistics. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/oecd-factbook\\_18147364](http://www.oecd-ilibrary.org/economics/oecd-factbook_18147364)

#### Internet resources:

- [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)
- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Europe\\_in\\_figures\\_-\\_Eurostat\\_yearbook](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Europe_in_figures_-_Eurostat_yearbook)
- [http://www.oecd-ilibrary.org/economics/real-net-national-income\\_2074384x-table16](http://www.oecd-ilibrary.org/economics/real-net-national-income_2074384x-table16)
- [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries\\_2221433x](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries_2221433x)

### **Seminar 3.2 System of national accounts. Macroeconomic indicators' analysis.**

#### Compulsory readings:

- Lequiller F., Blades D. (2014) Understanding National Accounts: Second edition. OECD Publishing.

### Further readings:

- Галкин С.А., Григоруk Н.Е. Симонова М.Д. Практикум по статистике для работы с материалами статистических справочников. М.: МГИМО-Университет, 2011. - 89 с.
- Статистика : учебник для вузов / под ред. И.И. Елисеевой. - Москва : Проспект, 2017. - 448 с.
- National Accounts of OECD Countries. Volume 2017 Issue 1: Main Aggregates. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries-volume-2013-issue-1\\_na\\_ma\\_dt-v2013-1-en](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries-volume-2013-issue-1_na_ma_dt-v2013-1-en)
- National Accounts of OECD Countries, Volume 2017 Issue 2: Detailed Tables. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries\\_2221433x](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries_2221433x)
- OECD Factbook 2021: Economic, Environmental and Social Statistics. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/oecd-factbook\\_18147364](http://www.oecd-ilibrary.org/economics/oecd-factbook_18147364)

### Internet resources:

- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Europe\\_in\\_figures\\_-\\_Eurostat\\_yearbook](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Europe_in_figures_-_Eurostat_yearbook)
- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Statistics\\_Explained](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Statistics_Explained)
- [http://epp.eurostat.ec.europa.eu/portal/page/portal/product\\_details/publication?p\\_product\\_code=KS-RA-12-025](http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-RA-12-025)
- <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=teilm020&tableSelection=1&plugin=1>
- [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries\\_2221433x](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries_2221433x)
- <http://comtrade.un.org/db/>
- [http://unstats.un.org/unsd/publication/seriesf/SeriesF\\_87\\_Add1\\_corr.pdf](http://unstats.un.org/unsd/publication/seriesf/SeriesF_87_Add1_corr.pdf)

### **Lecture 3.3. System of national accounts. Gross domestic product**

*Summary:* Gross domestic product: three approaches. Gross national income. Gross national disposable income. Deflator. Analytical Indicators for government economic and social programs.

### **Seminar 3.3. System of national accounts. Gross domestic product**

#### Compulsory readings:

— Lequiller F., Blades D. (2014) Understanding National Accounts: Second edition. OECD Publishing.

#### Further readings:

- Статистика: учебник для вузов / под ред. И.И. Елисейевой. - Москва : Проспект, 2017. - 448 с.
- National Accounts of OECD Countries. Volume 2021 Issue 1: Main Aggregates. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries-volume-2021-issue-1\\_na\\_ma\\_dt-v2013-1-en](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries-volume-2021-issue-1_na_ma_dt-v2013-1-en)
- National Accounts of OECD Countries, Volume 2021 Issue 2: Detailed Tables. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries\\_2221433x](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries_2221433x)
- OECD Factbook 2021: Economic, Environmental and Social Statistics. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/oecd-factbook\\_18147364](http://www.oecd-ilibrary.org/economics/oecd-factbook_18147364)

#### Internet resources:

- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Europe\\_in\\_figures\\_-\\_Eurostat\\_yearbook](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Europe_in_figures_-_Eurostat_yearbook)
- [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Statistics\\_Explained](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Statistics_Explained)
- [http://epp.eurostat.ec.europa.eu/portal/page/portal/product\\_details/publication?p\\_product\\_code=KS-RA-12-025](http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-RA-12-025)
- <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=teilm020&tableSelection=1&plugin=1>
- [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries\\_2221433x](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries_2221433x)
- <http://comtrade.un.org/db/>
- [http://unstats.un.org/unsd/publication/seriesf/SeriesF\\_87\\_Add1\\_corr.pdf](http://unstats.un.org/unsd/publication/seriesf/SeriesF_87_Add1_corr.pdf)
- Gks.ru

## **Topic 4. Statistics of International Trade**

### **Seminar 4.1 Statistics of International Trade and Globalization**

*Summary:* International trade in goods and services. Exports, Imports, balance. General and special system. CIF, FOB. Terms of Trade. Balance of payment. Globalization indicators.

### Compulsory readings:

- Lequiller F., Blades D. (2014) Understanding National Accounts: Second edition. OECD Publishing.
- International Merchandise Trade Statistics: Concepts and Definitions 2010 (IMTS 2010) / United Nations, Department of Economic and Social Affairs, Statistics Division. - <http://www.un.org/en/development/desa/publications/international-merchandise-trade-statistics-concepts-and-definitions-2010-imts-2010.html>
- Manual on Statistics of International Trade in Services 2010 (MSITS 2010) / United Nations, Department of Economic and Social Affairs, Statistics Division. -. <http://unstats.un.org/unsd/tradeserv/tfsits/manual.htm>
- Export and Import Price Index Manual: Theory and Practice. e. – [Washington, D.C.] : International Monetary Fund, 2009. ; см.

### Further readings:

- Григорук Н.Е. Статистика внешнеэкономических связей и международной торговли: учебник/Н.Е.Григорук. – М.: МГИМО-Университет, 2014. - 264 с.

### Internet resources:

- <https://www.imf.org/external/pubs/cat/longres.aspx?sk=19587.0>
- [http://epp.eurostat.ec.europa.eu/international\\_trade\\_statistics](http://epp.eurostat.ec.europa.eu/international_trade_statistics)
- [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries\\_2221433x](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries_2221433x)
- <http://comtrade.un.org/db/>
- [http://unstats.un.org/unsd/publication/seriesf/SeriesF\\_87](http://unstats.un.org/unsd/publication/seriesf/SeriesF_87)
- Gks.ru

## **2.3 Exam Questions**

1. Data and statistics.
2. Elements, Variables, Observations in Statistics.
3. Scales of Measurement.
4. Qualitative and Quantitative Data.
5. Tabular Presentations.
6. Graphical Presentations.
7. Summarizing quantitative data.
8. Mean. Weighted Mean.
9. Grouped Data.
10. Time series.

- 11.Rates of change.
- 12.Growth rates – base and chain.
- 13.Index numbers: value, volume, price.
- 14.Index numbers: Paasche, Laspeyres.
- 15.Consumer price and producer price index.
- 16.Dow Jones Averages.
- 17.Population: Geographical coverage. Territorial composition.
- 18.Comparability over time and International comparability of Total population.
- 19.Age distribution. Statistics of live birth, death.
- 20.Vital statistics: foetal death, marriage and divorce.
- 21.International Labour Organization, Regulation 1372/2007.
- 22.Economically active population. Labour force categories.
- 23.Resident population of working age.
- 24.Persons employed, unemployed.
- 25.Economically inactive persons.
- 26.Labour market. Employment and unemployment.
- 27.System of national accounts. Economic territory.
- 28.SNA: residents, production boundary.
- 29.Taxes in SNA
- 30.Subsidies in SNA.
- 31.System of prices in SNA: factor cost, basic prices, market prices.
- 32.SNA: Institutional sectors.
- 33.Industries in SNA. ISIC -4.
- 34.SNA: Gross Value Added.
- 35.MEI: Compensation of employees, Gross operating surplus.
- 36.MEI: Final consumption expenditure.
- 37.Gross Capital formation. Capital Transfers.
- 38.Gross domestic product, Deflator.
- 39.Gross domestic product: production approach.
- 40.Gross domestic product: income approach.
- 41.Gross domestic product: expenditure approach.
- 42.Gross national income. Gross national disposable income.
- 43.International trade in goods and services. Exports, Imports, balance.
- 44.General and special system.
- 45.Prices in external trade: CIF, FOB.
- 46.Terms of trade.
- 47.Balance of payment.
- 48.Globalization indicators.

## 2.4 Exam timing

Spring semester tests – last week of May; exams last week of May

## 2.5 Consolidated reading list

### Compulsory readings

1. Hardle W.K, Klinke S., Ronz B. Introduction to Statistics: Using Interactive MM\*Stat Elements / Wolfgang Karl Hardle, Sigbert Klinke, Bernd Ronz. – Berlin: Springer, 2015.
2. O'zdemir D. Applied Statistics for Economics and Business. Second Edition Durmus, O' zdemir //Yasar University. Izmir, Turkey. 2016.
3. Anderson D., Sweeney D., Williams Th. Statistics for Business and Economics. Cengage Publishing, 2017.
4. Giovannini E. Understanding Economic Statistics: An OECD Perspective. OE CD, 2008.
5. Lequiller F., Blades D. (2014) Understanding National Accounts: Second edition. OECD Publishing.
6. Международные стандарты национального счетоводства: учебное пособие/ М.Д. Симонова. М.: МГИМО-Университет. 2019. – 272 с.
7. Основы международной статистики : учебник / под общ. ред. д-ра экон. наук Ю.Н. Иванова. — М.: ИНФРА-М, 2018. — Режим доступа: <http://znanium.com/catalog/product/945546>
8. Практикум по статистике :учеб. пособие / под ред. Е.Г. Борисовой, Т.А. Курашевой; МГИМО МИД России, каф. учета, статистики и аудита. – 3-е изд., перераб. и доп. – М.: МГИМО-Университет, 2020. – 171 с.

### Further readings

1. Ostle B. Statistics in Research: basic concepts and techniques for research workers. - Ames: Iowa State University Press. 4 ed.
2. Energy markets globalization analysis: monograph/ M.D. Simonova, MGIMO-University Publishing. 2016. – 434 с.
3. Handbook on Population and Housing Census Editing, Revision 1 / United Nations, Department of Economic and Social Affairs, Statistics Division. [http://unstats.un.org/unsd/publication/SeriesF/seriesf\\_82rev1e.pdf](http://unstats.un.org/unsd/publication/SeriesF/seriesf_82rev1e.pdf)



4. International Merchandise Trade Statistics: Concepts and Definitions 2010 (IMTS 2010) / United Nations, Department of Economic and Social Affairs, Statistics Division. - <http://www.un.org/en/development/desa/publications/international-merchandise-trade-statistics-concepts-and-definitions-2010-imts-2010.html>
5. Manual on Statistics of International Trade in Services 2010 (MSITS 2010) / United Nations, Department of Economic and Social Affairs, Statistics Division. <http://unstats.un.org/unsd/tradeserv/tfsits/manual.htm>
6. National Accounts of OECD Countries. Volume 2021 Issue 1: Main Aggregates. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries-volume-2013-issue-1\\_na\\_ma\\_dt-v2013-1-en](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries-volume-2013-issue-1_na_ma_dt-v2013-1-en)
7. National Accounts of OECD Countries, Volume 2021 Issue 2: Detailed Tables. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries\\_2221433x](http://www.oecd-ilibrary.org/economics/national-accounts-of-oecd-countries_2221433x)
8. OECD Factbook 2021: Economic, Environmental and Social Statistics. OECD Publishing. - [http://www.oecd-ilibrary.org/economics/oecd-factbook\\_18147364](http://www.oecd-ilibrary.org/economics/oecd-factbook_18147364)
9. Григорук Н.Е. Статистика внешнеэкономических связей и международной торговли: учебник/ Н.Е.Григорук. – М.: МГИМО-Университет, 2014.- 264 с.
10. Статистика : учебник для вузов / под ред. И.И. Елисеевой. - Москва : Проспект, 2017. - 448 с.
11. EU labour force survey – main features and legal basis. <http://epp.eurostat.ec.europa.eu>
12. Handbook on Population and Housing Census Editing, Revision 1 / United Nations, Department of Economic and Social Affairs, Statistics Division. - [http://unstats.un.org/unsd/publication/SeriesF/seriesf\\_82rev1e.pdf](http://unstats.un.org/unsd/publication/SeriesF/seriesf_82rev1e.pdf)
13. Handbook on the Management of Population and Housing Censuses [https://unstats.un.org/unsd/publication/seriesF/Series\\_F83Rev2en.pdf](https://unstats.un.org/unsd/publication/seriesF/Series_F83Rev2en.pdf)
14. United Nations Demographic Yearbook. 2021. N-Y., UN.

#### **Data bases, Internet resources:**

1. Online library of the Organisation for Economic Cooperation and Development (OECD iLibrary): <http://www.oecd-ilibrary.org/>
2. United Nations Statistics Division. <http://unstats.un.org/>
3. EU statistical Commission. <http://ec.europa.eu/eurostat>
4. Росстат. [Gks.gov.ru](http://Gks.gov.ru)

In the process of studying the course "Statistics", the use of online methodological complexes in the MOODLES and GOOGLE system is provided.

### Examples of Tests, Assignments

#### Test

Choose correct answer.

Question	1	2	3
A de facto population includes	all usual residents of the given country whether or not they were physically present in the area at the reference date	all persons physically present in the country at the reference date.	Crude Birth rates - Death rates
Crude Birth rates =	number of born people/mid-year female population 15-49 * 1000	number of deaths/mid-year population * 1000	number of born people/mid-year population * 1000
GDP combines	with no double counting, all the output carried out by all the firms, non-profit institutions, government bodies and households in a given country	the total income (excluding capital gains and losses) of all economic agents residing within the territory (households, firms and government institutions)	the products consumed in the production process during the period
Base Rate of change for labour force time series	$Y1/Y2*100\%$	$Y1/\sum Y11*100\%$	$Yn/Yo*100\%$

EX.

Compute the average price for the Burberry woman's hats if the price of 2 models is 6500 rubles, the price of 3 models is 5950 rubles.

EX.

Compute the average price for LV bags if the price of 3 models is 65000 rubles, the price of 4 models is 59500 rubles.

### PART 3. FINAL REMARKS

The course "Statistics" provides an overview of major indicators and variables of social and economic development of countries, regions and international

organizations. The course provides students with foundational knowledge in descriptive statistics, social and demographic statistics, labour force statistics, system of national accounts, gross domestic product and macroeconomic indicators, deflator, international trade in goods and services and other international statistical standards. Students are introduced to the ways of collecting, analyzing, presenting and interpreting data on the basis of national and international organizations' on-line statistical databases (UN, EU, OECD, GKS etc.).

Main student' learning outcome is a self-dependent computing and analysis of main processes outlines for the activities of individual companies, Government economic and social programs and for international social and economic development.