

**Luhansk Taras Shevchenko National University**

**INSTITUTE OF ECONOMICS AND BUSINESS**

**Department of Economic Theory and Applied Statistics**

**presents**

# **Applied Statistics Graduate program**

**(since 2007)**



*“A knowledge of statistics is like a knowledge of a foreign language or of algebra; it may prove of use at any time under any circumstances”*

*Arthur Lyon Bowley. English statistician and economist worked on economic statistics and pioneered the use of sampling techniques in social surveys.*

**The growing status of statisticians and analysts all over the world is the result of an explosive growth of information that needs scientific processing and analysis**

**According to research of IDC company, the growth rate of digital information in 2014 will increase five-fold**

I keep saying the sexy job in the next ten years will be statisticians. People think I'm joking, but who would've guessed that computer engineers would've been the sexy job of the 1990s?

The ability to take data - to be able to understand it, to process it, to extract value from it, to visualize it, to communicate it's going to be a hugely important skill in the next decades, not only at the professional level but even at the educational level for elementary school kids, for high school kids, for college kids. Because now we really do have essentially free and ubiquitous data. So the complimentary scarce factor is the ability to understand that data and extract value from it.

I think statisticians are part of it, but it's just a part. You also want to be able to visualize the data, communicate the data, and utilize it effectively. But I do think those skills - of being able to access, understand, and communicate the insights you get from data analysis - are going to be extremely important. Managers need to be able to access and understand the data themselves.

**Hal Ronald Varian**  
**Chief Economist at Google, professor at the**  
**University of California, Berkeley**

**World Statistics Day**

**was celebrated for the first  
time**

**on 20 October 2010 worldwide.**

**The United Nations Statistical  
Commission declared the day.**

# Importance of Statistics

Statistics is the science, which deals with the method of collecting, classifying and interpreting numerical data collected.

Statistics simplifies complexity. It presents raw facts in a definite and precise form. It helps in the condensation of data. It helps in the comparison and in the testing of data. It helps the government in formulating policies. So we can say that Statistics plays a vital role in every walk of life.

# Applied Statistics has its applications in both business and economics

- Any modern business firm faces uncertainty concerning future operations such as production, investments, inventory and marketing of products. In order to be successful in decision making under the atmosphere of uncertainty, a business man has to use statistical methods to analyze and synthesize data relating to business. A businessman needs Statistics right from the time he plans to start a business.
- Statistical data and statistical methods provide valuable assistance for the study and solution of economic problems and also help in designing economic policies. It is almost impossible to find a problem in Economics, which does not require an extensive use of statistical data. The use of statistical methods increases with the increase in the usage of economic theory.

# Statistics and Physical Science

Statistics plays a great role in the study of physical sciences especially astronomy, geology, physics, meteorology and chemistry. The use of statistical methods is not only very essential but to some extent is unavoidable. Conversion of heterogeneous data into homogenous, interpretation methods and drawing inferences are places where physical sciences depend to a great extent on the science of statistics.



# Statistics and State or Country

Earlier statistics was said to be science of king (However they didn't term it as statistics). The kings relied heavily on statistics for knowing man power for military purposes. Statistics was used as a tool to study the functions for the welfare of the states to frame suitable policies and corrective actions. Statistics was used by the government in understanding the census, finances, and other recurrences. Even now the governments across the globe rely on statistical data for analyzing, understanding and taking important decisions towards development of the country

# Career Opportunities for Graduates

Statistics is a much-needed tool in many industries. Graduates from this program may find research, management and consultancy positions in areas such as market research, government agencies, medical and biological sciences, town planning, social research, education, banking and insurance.

As a statistician with a master's degree, you can greatly expand your career options in business; industry; local, state, or federal government; and educational and research organizations.

# **Our graduates work as:**

**economists**

**financial planners**

**insurance researchers**

**quality control managers**

**market researchers**

**project managers**

**public health researchers**

**statistical consultants**

# Economist

Upon completion of a master's degree program in applied statistics, students may explore career options in a wide range of industries. Economics is one such field M.A. and M.S. earners are ready to pursue careers in. According to the U.S. Bureau of Labor Statistics (BLS), the median yearly pay for economists was \$89,450 in May 2010, and employment of economists was expected to increase by 6% through 2020.

# Statistician

Another common vocation sought by degree holders is that of a statistician. This career involves designing and identifying determining factors for surveys, experiments, and polls, interpreting that data, and applying it to answer questions and solve problems. The BLS reported that statisticians earned \$72,830 a year in 2010. Demand for statisticians is expected to increase by 14% in the upcoming eight years.

# Analyst

A third occupation students seek upon graduation is in market research as analysts. Market research analysts study and analyze markets to determine the demographics and optimum price for a given product or service. The BLS reported that the median yearly salary of market research analysts was \$60,570 in 2010, and PayScale.com states that they can make as much as \$67,818 annually. This career choice is projected to grow the most of the three occupations, with a 41% increase expected through 2020.

# Technology Support

- Luhansk Taras Shevchenko National University service allows students to access user-friendly access to course materials, lecture notes, video presentations, assignments, exams, discussion boards, and an email system so they can contact their professors and peers.

# Library and Research Support

- Luhansk Taras Shevchenko National University has online University Libraries system. This service allows students to search for e-journals, books, articles, and in the library's databases and course reserves. Students can also look through the university's digitized collections which include books, journals, manuscripts, maps, thematic collections, image collections, exhibits, historical newspapers, and more.



# Facilities

As a student you will gain access to a range of facilities. These include a well-resourced library, computer laboratories, swimming pool, fitness, volleyball, handball or basketball teams and health facilities, housing.



# Graduate certificate students will have:

- proficiency in the IBM SPSS Statistics software package
- understanding of the need for and methods of acquiring good data, achieved through the inclusion of subject matter relating to data screening, survey design, experimental design and the collection of observational data
- well-rounded, competent graduates with adequate quantitative skills in areas such as exploratory data analysis, estimation and hypothesis testing
- good report writing skills honed using assignment work, weekly online quizzes and online discussion
- a flexible approach to problem-solving with an ability to listen to and understand the advice and opinions of domain experts; these skills are developed through the use of actual problems and real data in lectures and assignments.

# Students will have the opportunity to undertake research

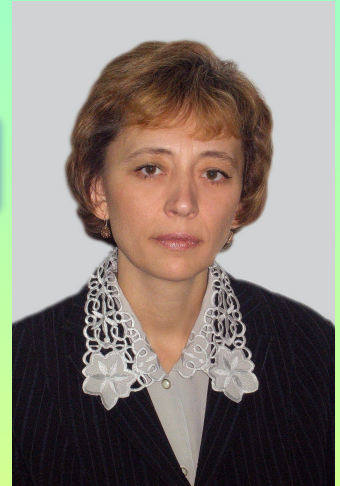
including an industrial/research project and/or assignments involving practical problems and data of relevance to their work interests. Students will therefore gain experience in the areas of problem formulation, data preparation, data analysis and reporting of results in a work situation.

# Key staff



**Professor *Dr. Matrosova L.M.***

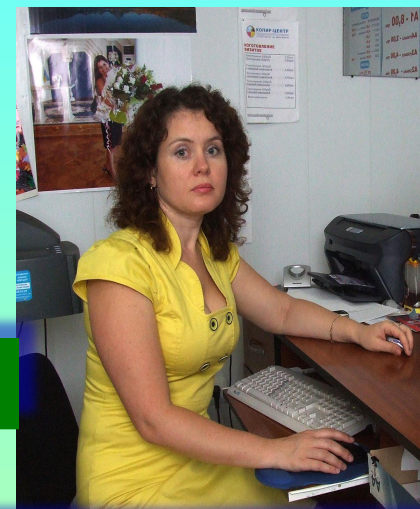
**Associate Professor *PhD Chebotarova N.M.***



**Associate Professor *PhD Skorohod N.M.***



*Associate Professor **PhD Zaika I.P.***



*Associate Professor **PhD Sporniak S.O.***



*Associate Professor **PhD Zolotov A.F.***



*Associate Professor **PhD Kondrateva T.V.***





**Our staff are highly qualified professionals and teachers**

# International activity is the priority direction of the University's work.

- The citizens of Azerbaijan , Angola , Belarus , Ghana , Greece , Georgia , Egypt , Israel , India , Iraq , Jordan , Cameroon , China , Libya , Morocco , Nigeria , Pakistan , Russia , Saudi Arabia , Serbia , Syria , Tunisia , Turkmenistan , Uzbekistan , France , Sweden are among the foreign students of our University.
- The language of studies for foreign students is variable. Students are free to choose Ukrainian, Russian or English as a language of teaching when studying to get Bachelor's or Master's Degree.
- Teachers and students of the University apply to DAAD, Edmund Muskie, Fulbright, IREX, Renaissance Fund grants. They cooperate with the Centre of American Studies in Ukraine , CUPP, CCUSA, Camp America , Work and Travel USA , Work Experience USA , Au-Pair, and Volunteer Student Programs. Winners of selective procedures go abroad for study, work and doing Master courses.

**Our site <http://ieb.luguniv.edu.ua>**

**Features Admissions foreigners**

**<http://luguniv.edu.ua/?z1=b,3425>**





Welcome to  
the University!

We are  
waiting for  
you!

