

Документ подписан простой электронной подписью
Информация о владельце:
ФИО: Ястребов Олег Александрович
Должность: Ректор
Дата подписания: 15.05.2024 16:14:32
Уникальный программный ключ:
ca953a0120d891083f939673078ef1a989dae18a

**Federal State Autonomous Educational Institution for Higher Education
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA
(RUDN University)
Faculty of Economics**

COURSE SYLLABUS

ECONOMIC INFORMATICS

**Recommended by the Didactic Council for the Education Field of
38.03.01 Economics**

(code and name of the direction of training/specialty)

**The development of the discipline is carried out within the framework of the
implementation of the main professional educational program of higher education:**

International Economic Relations

(name (profile/specialization))

1. COURSE GOALS

The purpose of the discipline "Economic Informatics" is to study the information processes occurring in society, methods and means of obtaining, transforming, transmitting, storing and using information related to the use of information technologies.

2. LEARNING OUTCOMES

Studying the discipline "Economic informatics" is aimed at the formation of the following competencies (part of competencies) among students:

Table 2.1. List of competencies formed in students when studying the discipline (results of mastering the discipline)

Competence code	Competence	Competence indicators
GC-12	Able to: search for the necessary sources of information and data, perceive, analyze, memorize and transmit information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems; evaluate information, its reliability, build logical conclusions based on incoming information and data	GC – 12.1. Know how to search for the necessary sources of information and data, perceives, analyzes, memorizes and transmits information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems
		GC – 12.2. Able to evaluate information, its reliability, builds logical conclusions based on incoming information and data
GPC-1	Able to apply knowledge (at an intermediate level) of economic theory in solving applied problems	GPC-1.1. Knows the conceptual apparatus, basic economic laws and methods of economic science
		GPC-1.2. Able to identify economic problems in the analysis of specific situations and argue his position
		GPC-1.3. Able to identify the main patterns of economic development and apply them to model the behavior of economic entities
GPC-2	Able to collect, process and statistically analyze the data necessary to solve the set economic problems	GPC-2.1. Able to manage methods and means of collecting, processing and analyzing information necessary to solve standard tasks of a technical and economic assessment of activities in the field of professional activity
		GPC-2.2. Understands the basics of information and bibliographic culture, allowing you to select the relevant information required for conducting technical and economic calculations in professional activities

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The discipline "Economic informatics" refers to the part formed by the participants of the educational relations of block B1 of the EP.

Within the framework of the EP, students also master other disciplines and / or practices that contribute to the achievement of the planned results of mastering the discipline "Economic informatics".

Table 3.1. List of Higher Education Program (me) components / disciplines that contribute to expected learning/training outcomes

Code	Competence	Previous disciplines/modules, practices*	Subsequent disciplines/modules, practices*
GC-12	Able to: search for the necessary sources of information and data, perceive, analyze, memorize and transmit information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems; evaluate information, its reliability, build logical conclusions based on incoming information and data	Computer science Statistics for Economists	International statistical databases Interdisciplinary coursework Interdisciplinary coursework project Business process modeling Geographic Information Systems: Visualization of Spatial Data Business on the Internet Basics of international trade Electronic commerce in international business Big Data Project-technological internship Undergraduate practice Final state examination procedures Degree thesis procedures
GPC-1	Able to apply knowledge (at an intermediate level) of economic theory in solving applied problems	Accounting Statistics for Economists	Foreign Trade Policy International logistics International Investment Strategies Theory and practice of international business Islamic finance Final state examination procedures Degree thesis procedures

Code	Competence	Previous disciplines/modules, practices*	Subsequent disciplines/modules, practices*
GPC-2	Able to collect, process and statistically analyze the data necessary to solve the set economic problems	Statistics for Economists Econometrics	Interdisciplinary coursework project Business on the Internet Basics of international trade International Financial Reporting Standards Electronic commerce in international business Technological internship Final state examination procedures Degree thesis procedures

4. COURSE WORKLOAD AND LEARNING ACTIVITIES

The total labor intensity of the discipline "Economic informatics" is 3 credits.

Table 4.1. Types of educational work by periods of mastering the EP HE for full-time education

Type of educational work	TOTAL, academic hours	Semester(s)			
		1	2	3	4
<i>Contact academic hours</i>	34		34		
including:					
Lectures					
Laboratory works	34		34		
Practical/Seminar Classes					
<i>Self-study (ies), academic hours</i>	56		56		
<i>Evaluation and assessment academic hours</i>	18		18		
Overall labor intensity of the discipline	<i>academic hours</i>	108		108	
	Credits	3		3	

5. COURSE MODULES AND CONTENTS

Table 5.1. The content of the discipline (module) by types of educational work

Course Modules and Contents	Modules and Topics (Units/Themes)
Section 5: Creating Spreadsheets	Topic 5.1: Creating Spreadsheets
	Topic 5.2. Computing. Cell names. Relative and absolute references.
	Topic 5.3. Formats. Custom format. Data validation.
Section 6. Calculation, processing and analysis of data.	Topic 6.1. Conditional formatting. Range names

Course Modules and Contents	Modules and Topics (Units/Themes)
	Topic 6.2: Computing: Trigonometric Functions.
	Topic 6.3. Special insert. Rounding functions. Arrays. Matrix
Section 7. Organize your data by using Excel spreadsheets. Excel functions.	Topic 7.1 Statistical functions.
	Topic 7.2 Logic functions
Section 8. Create charts to visualize your data.	Topic 8.1 Charting for Data Visualization
	Topic 8.2 Date and Time Functions. Text Functions.
Section 9. PivotTables and PivotCharts.	Topic 9.1 VLOOKUP functions, GPR, INDEX, MATCH
	Topic 9.2 Sorting, AutoFilter, Advanced Filter, Subtotals. Formulas for working with a list of data
	Topic 9.3 PivotTables and Summary Charts. Consolidation
Section 10. Solving problems with what-if analysis».	Topic 10.1 Lookup table. Parameter selection. Script Manager. Find a solution. Financial functions
Section 11. Create and use macros to automate your work.	Topic 11. 1 Basics of regression analysis
	Topic 11.2 Creating. and macro editing. Run macros. Use macros. Creating User-Defined Functions

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Logistics of discipline

Audience type	Equipping the classroom	Specialized educational/laboratory equipment, software and materials for mastering the discipline (if necessary)
Lecture hall	Auditorium 101 for conducting lecture-type classes, equipped with a set of specialized furniture; a blackboard (screen) and technical means of multimedia presentations.	Asus F6A Laptop, Casio XJ-S 400 UN Multimedia Projector, Casio XJ-V 100W Multimedia Projector, GEHA 244*244 Projection Screen, Draper 203*1 Wired Screen, Defender Mercury 35 Mk11 Speaker System, Philip TV
Seminary	Auditorium 103 for seminar-type classes, group and individual consultations, ongoing monitoring	Asus F6A Laptop, Casio XJ-S400UN Multimedia

Audience type	Equipping the classroom	Specialized educational/laboratory equipment, software and materials for mastering the discipline (if necessary)
	and interim certification, equipped with a set of specialized furniture and multimedia presentation equipment.	Projector, Digis Electra MW DSEM - 1105 Motorized Screen
	Computer class 19 for conducting classes, group and individual consultations, current control and intermediate certification, equipped with personal computers (in the amount of 21 pcs.), a blackboard (screen) and multimedia presentation equipment.	Lenovo Intel I5 10160T/8 GB/256 GB/audio Monoblock, 24" monitor, Casio XJ-V 100W Multimedia Projector, Digis Electra 200*150 Dsem-4303 motorized Screen
Computer class	Auditorium 29 for independent work of students (can be used for seminars and consultations), equipped with a set of specialized furniture and computers with access to EIOS.	Lenovo AIO-510-22ISH Intel I5 2200 MHz/8 GB/1000 GB/DVD/audio Monoblock, 21" monitor, Casio XJ-V 100W Multimedia Projector, Motorized Digis Electra 200*150 Dsem-4303 screen

7. RECOMMENDED SOURCES FOR COURSE STUDIES

Main literature:

1. Informatics for economists: Textbook / Pod ob. Red. V.M.Matyushka. – 2nd ed. pererab. i dop. – M.: INFRA-M, 2016. – 460 p. + Additional. [Materials](http://lib.rudn.ru/MegaPro2/UserEntry?Action=Rudn_FindDoc&id=446425&idb=0) http://lib.rudn.ru/MegaPro2/UserEntry?Action=Rudn_FindDoc&id=446425&idb=0
2. Gomonov K.G., Reshetnikova M.S., Silla N.A., Shevtsova N. A. Ekonomicheskaya informatika. Tutorial. – M.: RUDN, 2021. – 157 p.
3. Revinova S.Yu., Reshetnikova M.S., Gremyakina N.A. Laboratory workshop on informatics for economists. Izd-vo RUDN, 2015. (electronic version: <http://lib.rudn.ru/ProtectedView/Book/ViewBook/5277>).

Further reading:

1. Economic Informatics: Textbook and Practicum for Secondary Vocational Education / Y. D. Romanova [et al.] ; edited by Y. D. Romanova. — Moscow : Izdatelstvo Yurait, 2021. — 495 p. — (Vocational education). — ISBN 978-5-534-13400-1. — Text : electronic // Educational platform Yurait [site]. — URL: <https://urait.ru/bcode/477105>
2. Informatics. In 2 volumes. Textbook for Universities /Ed. Trofimov V.V. – 3rd ed. pererab. and add. – Moscow: Yurayt Publishing House, 2021. – 406 p. Electronic access: <https://urait.ru/viewer/informatika-v-2-t-tom-2-470745#page/2>
3. Informatics for economists : textbook for universities / V. P. Polyakov [et al.] ; edited by V. P. Polyakov. — Moscow : Izdatelstvo Yurait, 2021. — 524 p. — (Higher education).

- ISBN 978-5-534-11211-5. — Text : elektronnyi // EBS Yurayt [site]. — URL: <https://urait.ru/bcode/468654>.
4. Informatics for humanitarians : textbook and practicum for academic bachelor ' / Ed. by G.E. Kedrovoy. - M. : Yurayt, 2017. - 439 p. - (Bachelor. Academic course). - ISBN 978-5-534-01031-2 : 1019.00.

Resources of the information and telecommunication network "Internet":

1. RUDN University EBS and third-party EBS, to which university students have access on the basis of concluded contracts:

- ELECTRONIC LIBRARY SYSTEM RUDN University – EBS RUDN University <http://lib.rudn.ru/MegaPro/Web>

- EBS University Library Online <http://www.biblioclub.ru>

- EBS Jurait <http://www.biblio-online.ru>

- EBS Student Consultant www.studentlibrary.ru

- EBS "Lan" <http://e.lanbook.com/>

- EBS Troitsky Bridge

2. Databases and search engines:

- electronic fund of legal and normative-technical documentation [of the http://docs.cntd.ru/](http://docs.cntd.ru/)

- Yandex search engine [https:// www.yandex.ru/](https://www.yandex.ru/)

- Google <https://www.google.ru/> search engine

- Abstract database SCOPUS [http:// www.elsevierscience.ru/products/scopus/](http://www.elsevierscience.ru/products/scopus/)

Educational and methodical materials for independent work of students when mastering the discipline / module:*

1. A course of lectures on the discipline "Informatics".

2. Laboratory workshop on the discipline "Informatics"

8. EVALUATION TOOLKIT & GRADING SYSTEM FOR ASSESSING THE LEVEL OF FORMATION OF COMPETENCIES IN THE COURSE

Evaluation materials and a grading system* for assessing the level of formation of competencies (part of competencies) based on the results of mastering the discipline "Economic informatics" are presented in the Appendix to this Course Syllabus of the discipline.

* - EP are formed on the basis of the requirements of the relevant local regulatory act of RUDN University.

AGREED

Developer:

Доцент, кафедра Экономико-
математического моделирования

Должность, БУП

Решетникова М.С.

Подпись

Фамилия И.О.

Head of the Higher Education Program(me)

Doctor of Economics, Professor of International economic relations



I.V. Andronova

