University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KÚA | Title of course: Accounting

FHI/IIE210012/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 3.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

26 hours of lectures

26 hours of seminars

13 hours of preparation for the lectures

26 hours of preparation for the seminars

26 hours of preparation for the continuous written essay (40 % of the overall grading)

39 hours of preparation for the final written exam (60 % of the overall grading)

Total study load (in hours): 156

Student workload:

26 hours of lectures

26 hours of seminars

13 hours of preparation for the lectures

26 hours of preparation for the seminars

26 hours of preparation for the continuous written essay (40 % of the overall grading)

39 hours of preparation for the final written exam (60 % of the overall grading)

Total study load (in hours): 156

Teaching results:

Teaching results

Upon finishing the course, the students will acquire the knowledge, competence and skills necessary for understanding the underlying economic assumptions of the accounting, fundamental principles of double-entry book-keeping, its regulatory framework, on the principles of preparation of the financial statements and the interpretation of the accounting data.

Knowledge

The student will acquire knowledge about the fundamental elements of financial statements (assets, liabilities, equity, expenses, income), their application in determination, presentation and assessment of economic results, and the relation between the transactions and other events and such elements. Consequently he/she will acquire knowledge on the accounting in its sense as an information system providing data for the bot the decisions making and confirmatory purposes. He/she will also acquire the knowledge about the need and the existence of various accounting regulatory frameworks, on the techniques of double-entry accounting, on the principles, procedures

and formal rules applied in accounting and on the content and the structure of the financial statements.

Competence

Upon finishing the course, the student will be able to identify the relations between the transactions and (respectively) other evets and fundamental elements of financial statements and to apply the fundamental principles and formal rules for maintaining the accounting records and for the preparation the documents for the preparation of the financial statements. Skills

The students will be able, in accordance with the relevant accounting regulations, to apply the principles of double-entry accounting to reflect the economic transactions and other events. On the other hand, based on the said accounting information, their will be able to explain the economic position of the accounting entity and its changes due to such transactions and events.

Indicative content:

Indicative content:

The accounting as a source of the economic information with confirmatory and predicting value. Measurement of assets and liabilities and its impact on accounting information. Regulatory framework of the accounting. Accounting statutes in the Slovak republic. Content and the structure of financial statements. General requirements for accounting information. Business activities of an enterprise and its general reflection in the accounting. Principles of double-entry accounting and their applications. Formal and technical aspects of the accounting Comparison of financial statements for micro entities, small entities and large entities

Support literature:

Juhászová, Z. a kol. (2021). Účtovníctvo. Bratislava: Wolters Kluwer

Užík, J. - Sigetová, K. - Užíková, L. (2023). Účtovníctvo zbierka príkladov. Bratislava : SKCÚ Pakšiová, R. – Janhuba, M. (2012). Teória účtovníctva v kontexte svetového vývoja. Bratislava : Wolters Kluwer.

Zákon č. 431/2002 Z. z. o účtovníctvo, v znení neskorších predpisov.

Zákon č. 513/1991 Z. z. Obchodný zákonník, v znení neskorších predpisov

Opatrenie Ministerstva financií č. 23054/2002 –92 ktorým sa ustanovujú podrobnosti o postupoch účtovania a rámcovej účtovej osnove pre podnikateľov účtujúcich v sústave podvojného účtovníctva v znení neskorších predpisov, v znení neskorších predpisov. Opatrenie Ministerstva financií Slovenskej republiky z 3. decembra 2014 č. MF/23377/2014-74, ktorým sa ustanovujú podrobnosti o individuálnej účtovnej závierke a rozsahu údajov určených z

ktorým sa ustanovujú podrobnosti o individuálnej účtovnej závierke a rozsahu údajov určených z individuálnej účtovnej závierky na zverejnenie pre veľké účtovné jednotky a subjekty verejného záujmu, v znení neskorších predpisov.

Syllabus:

1. The accounting as a source of the economic information with confirmatory and predicting value

Essential elements used in the accounting (assets, liabilities, equity, expenses, income), theire economic substance and application for the decisions focused on the future and for the assessment of the past performance. Users of the accounting information and their typical requirement on the content and the quality of information. Assessment of the impact of actual transactions and other events on the wealth of a company and its changes. Comparability of accounting information and its impact on a creation of accounting regulation-

2. Measurement of assets and liabilities and its impact on accounting information Role of the measurement in assessment of the past results and decisions oriented for the future. Relation between essential accounting elements and cash-flows. Measurement based on the input and output prices. Use of the market prices, models using discounted cash-flows from the continuing activities and models with anticipated deterioration of the value. Allocation of the

input and output prices. Procedures used for the non-monetary transactions and transactions with deferred payments.

3. Regulatory framework of the accounting

The International (IFRS) and national (SR, CR, US GAAP) accounting statutes – their impact on the comparability of the accounting information and the cost of their provision. The scope and the volume of the accounting information required by the users and their impact on the typical organization of the accounting systems. The accounting information cycle: transactions, conditions, and other events within a domain of the accounting, accounting records, journal and books of accounts, and financial statements. Demands for aggregation and confidentiality as a reason for the invention of financial statements. General overview of the financial statements. Comparison of provisions on books on accounting in national statutes (SR and CR), comparison of provisions on financial statements in the SR, CR, and in accordance with the IFRS.

4. Accounting statutes in the Slovak republic

Act on accounting and by-laws of the Ministry of finance of the Slovak republic – their function and scope. Relation between the accounting and other laws (Act on bankruptcy and restructuralization, Commercial code, Act on income taxes, Penal code). Accounting entity and the accounting related responsibilities of those with governing and controlling powers. Profit-based and other accounting entities. The role of the auditing of the financial statements.

5. Content and the structure of financial statements

Classification of financial statements based on various criteria (annual and interim, periodicity, size criteria, respective industries, number of accounting entities covered). General structure of the financial statements and its components. Need for distinction of the equity and liabilities, non-current and current items. Open-source data about financial statements in the SR and the USA.

- 6. General requirements for accounting information
- Definition of the: faitfhul presentation of the financial situation and the performance of the accounting entity, relevance, comparability, understandability, timeliness, materiality, substance over the form, going concern, accruals, prudence, consistence, and verifiability. Illustration of the impact of their (non)application on the decisions to be taken by the stakeholders.
- 7. Business activities of an enterprise and its general reflection in the accounting I Business activities of an enterprise, its operating cycle, and their relation to the accounting. Key performance indicators for the enterprise. Transactions and events (including their change in measurement) having and not having an effect on profit or loss. Transactions and events (including their change in measurement) having and not having an effect on indebtedness and the ability of an enterprise to settle its liabilities in an ordinary manner.
- 8. Business activities of an enterprise and its general reflection in the accounting II General characteristics of following typical transactions and events and their impact on the (sub)headings (and/or individual items respectively) of a balance-sheet and the income statements: purchase, consumption, sales, and payments and clearing with suppliers, customers, and employees.
- 9. Business activities of an enterprise and its general reflection in the accounting III General characteristics of common transactions and their impact on (sub)heading (individual line items) of the balance-sheet and income statement: depreciation / amortization, impairment, revaluation, formation of a business, financing by credits and loans, relations with government 10. Principles of double-entry accounting and their applications

General ledger and its role among the books of accounts, account, and double-entry accounting records. Use of double-entry and accounting equation as inherent controls of accounting. Fundamental principles of opening the accounts, examples of common accounting records of transactions on ledger accounts and fundamental principles of closing the ledger accounts.

11. Formal and technical aspects of the accounting I

Documentation used and / or produced by the accounting, its content, obligatory information to be provided and requirement for its maintenance and storing. Examples of business documentation (price quotations, (sales) orders, receipts, invoices, statements form bank accounts, stock cards) and their relation to business activities and operating cycle of an enterprise.

12. Formal and technical aspects of the accounting II

Confirmations of receivables and payables. Correction of errors. Stock-taking, its content, requirements for its realisation and its use as element of controls in accounting. Trial balance, its contents, its use as control of double-entry book-keeping a illustrative compilation based on a given data.

13. Comparison of financial statements for micro entities, small entities and large entities

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 2152

A	В	С	D	Е	FX
15.61	19.84	23.23	19.1	15.75	6.46

Lecturer: doc. Ing. Jitka Meluchová, PhD., Ing. Katarína Sigetová, Ing. Lenka Užíková, Ing. Kornélia Lovciová, PhD., Ing. Anton Marci, PhD.

Date of the latest change: 17.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Algorithms and Programming I.

FHI/IIA21100/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Requirements to complete the course:

- final exam - written form, 60% (passing the exam means obtaining at least 51% of the exam evaluation). The exam consists of two parts: verification of theoretical knowledge (test with different types of questions). The theoretical part verifies the achieved level of educational results A, B, E. Verification of practical skills - creation of a flow chart in the PS diagram and program in Python, where the level of educational results C, D, F, G is verified.

Exercises

Continuous tests 10%, continuous problem solving during exercises in pairs 10%, final task-algorithm creation 20%, 51% of this obligation is required for the exam

The following results of education C, D, F, G are developed and evaluated by evaluating an independent task and evaluating work in teams.

Student workload:

Total study load (in hours):

156 hours

Participation in seminars 52 hours, preparation for seminars 13 hours, final task elaboration 13 hours, preparation for continuous tests and tasks 13 hours, preparation for the exam 65 hours

Teaching results:

Upon completion of the course, students should have acquired the knowledge and skills to:

- A. knowledge to navigate the conceptual apparatus in the field of algorithm design and development
- B. understand the different types of data structures and how to create algorithms over data structures
- C. competence to formulate the essence of the problem to be solved in terms of the principles of algorithm design
- D. competence to transform an algorithm into the Python programming language on simple problems
- E. ability to understand simple source code in selected programming languages (understand the basic control structures of an algorithm)
- F. ability to work in pairs to design solutions to problems
- G. communicate and explain their algorithm designs

Indicative content:

- 1. Concept of algorithm, its properties, concept of Turing machine and connection with algorithm, algorithm representation
- 2. Basic control structures of the algorithm and algorithmization of oral simple tasks,
- 3. Creating a flowchart in the PS diagram application
- 4. Basics of Python programming
- 5. Parsing flowcharts into Python
- 6. Complexity of algorithms and notation Big O
- 7. Sorting algorithms and their efficiency, hash tables and their meaning
- 8. Sorting algorithms and their efficiency, recursion in programs
- 9. Different types of data structures (linear lists, trees, heaps, graphs) and work with them
- 10. State space and uninformed state space search algorithms (in width and depth)
- 11. Informed state space search algorithms (quantitative hill climbing heuristics and its modifications)
- 12. Optimization algorithms A * and its modifications
- 13. Working with modules.

- 1. Wengrow, J., A common-sense Guide to Data Structures and Algorithms, 2nd edition, The pragrmatic programmers, 2020
- 2. Skiena, S.S., The Algorithm Design Manual (Texts in Computer Science) 3rd ed., Springer, 2020
- 3. Wróblewski P.: Algoritmy, dátové a programovací techniky, Computer Press, Brno 2004
- 4. Pšenčíková, J., Algoritmizace, Computer Media, 2021
- 5. Pecinovský, J., Začínáme programovat v jazyku Python, Grada, 2020
- 6. Pecinovský, J., Python Kompletní příručka jazyka pro verzi 3.10, Grada, 2021

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 1067

A	В	С	D	Е	FX
13.12	19.59	25.59	18.56	16.31	6.84

Lecturer: doc. Ing. Jaroslav Kultan, PhD., RNDr. Eva Rakovská, PhD., Ing. Pavol Sojka, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Algorithms and Programming II.

FHI/IIA21105/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 7

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Exercises (40% of course evaluation)

The content of the exercise is the solution of assigned programming tasks. In addition to these tasks, students solve independent home programming assignments thematically related to lectures and solved programming tasks from exercises. Students comment on their solutions to independent home assignments with their technical descriptions, and they defend them in a possible discussion in front of other students of their study group. The solutions of independent programming assignments of students are evaluated (10% of the course evaluation). By solving and evaluating independent home assignments, the achieved level of the B, C, D, E, F, G, H educational results is verified. During the exercises, students complete an independent written work, solving a programming task in an integrated development environment, which is evaluated (30% of the course evaluation). By solving and evaluating the problem task from the independent written work, the achieved level of the C, D, E, F educational results is verified.

Exam (60% of the course evaluation)

The exam consists of two parts:

- from an independent exam written work, solution of a programming task in an integrated development environment, and defense of this solution (50% of the course evaluation). By solving and evaluating the problem task from the independent exam written work and defending this solution, the achieved level of the C, D, E, F, G educational results is verified.
- from the oral part, where students answer theoretical questions from the basics of algorithmization of programming tasks, a syntax of the C language and from the principles of procedural programming in the C language (10% of the course evaluation). The oral part of the exam and its evaluation verifies the achieved level of the A and B educational results.

Student workload:

Total study load (in hours): 7 credits x 26 hours = 182 hours

Distribution of study load

Participation in seminars: 52 hours Preparation for seminars: 26 hours Written assignments: 12 hours

Preparation for written work: 30 hours

Exam preparation: 62 hours

Teaching results:

After completing the course, students should be able to:

A understand the basics of algorithmization of programming tasks and the basic principles of procedural programming in the C language

B be familiar with the syntax of the C language and the semantic foundations of procedural programming in an integrated development environment

C analyse the assignment of the programming task, design an algorithm for its solution and implement the proposed algorithm using the syntactic rules of the C language and the procedural paradigm into the source code solving the assigned programming task

D eliminate possible syntactic errors in the source code solving the assigned programming task, to be able to identify and eliminate possible semantic errors

E analyse the behaviour of the final program with test input data using the integrated development environment debugger

F build the final program for the target operating system and the target hardware platform from the tested source code of the program solving the assigned programming task

G present and defend the proposed solutions to the assigned programming tasks at a professional level

H prepare a technical documentation (a report) describing their proposed solution to the assigned programming task

Indicative content:

- 1 Introduction to algorithms and algorithmization
- 2 Source form of a program created in the C language
- 3 The process of building a program created in the C language, properties of the C language
- 4 Input and output from and to programs created in the C language
- 5 Control structures used to control the flow of a program created in C
- 6 One-dimensional, multidimensional arrays and strings in a program created in C
- 7 Pointer and dereferencing the pointer in a program created in C language
- 8 Functions in a program created in the C language
- 9 Recursive functions in a program created in the C language
- 10 Programmer-defined data types in a program created in C
- 11 Structures, and structured variables in a program created in C
- 12 Casting data types of expression operands in a program created in C
- 13 Working with a disk file in a program created in C

Support literature:

KERNIGHAN, B. W., RITCHIE, D. M. Programovací jazyk C. Praha: Computer Press, 2006. ISBN 802510897X

SEDGEWICK, R. Algoritmy v C. Praha: SoftPress, 2003. ISBN 80-86497-56-9

VIRIUS, M. Jazyky C a C++. Praha: Grada, 2011. ISBN 9788024739175

ARCHER, T. Myslíme v jazyku C. Praha: Grada, 2002. ISBN 80-247-0301-7

HEROUT, P. Učebnice jazyka C I. díl. České Budějovice: KOPP, 2009. ISBN 9788072323838

HEROUT, P. Učebnice jazyka C II. díl, České Budějovice: KOPP, 2008. ISBN 9788072323678

ŠALOUN, P. Programovací jazyk C pro zelenáče. Praha: Neokortex, 1999. ISBN 80-86330-02-X

DOSTÁL, R. C/C++ hotová řešení. Brno: Computer Press, 2009. ISBN 978-80-251-2190-0

HANÁK, J. Programovaní v jazyce C. Malejov: Computer Media, 2011. ISBN 9788074020414 SCHILDT, H. Nauč se sám C. Praha: SoftPress, 2002. ISBN 80-86497-16-X

CHUDÁ, D., JURÍKOVÁ, L., MEDVEĎOVÁ, E., TURŇA, Ľ.: Programovanie v jazyku C. Bratislava: Ekonóm, 2006. ISBN 80-225-2186-8

LIDAY, M. a kol. Programovanie 1(Jazyk C). Bratislava: Ekonóm, 1997. ISBN 80-225-0877-2

Syllabus:

Language whose command is required to complete the course:

slovak

Notes:

Assessment of courses

Total number of evaluated students: 748

A	В	С	D	Е	FX
6.28	10.29	17.11	28.61	29.81	7.89

Lecturer: doc. Ing. Jaroslav Kultan, PhD., Ing. Igor Košťál, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Algorithms and Programming III.

FHI/IIA21110/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 3.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Exercises (40% of course evaluation)

The content of the exercise is the solution of assigned programming tasks. In addition to these tasks, students solve independent home programming assignments thematically related to lectures and solved programming tasks from exercises. Students comment on their solutions to independent home assignments with their technical descriptions, and they defend them in a possible discussion in front of other students of their study group. The solutions of independent programming assignments of students are evaluated (10% of the course evaluation). By solving and evaluating independent home assignments, the achieved level of the B, C, D, E, F, G, H, I educational results is verified. During the exercises, students complete an independent written work, solving a programming task in an integrated development environment, which is evaluated (30% of the course evaluation). By solving and evaluating the problem task from the independent written work, the achieved level of the B, C, D, E, F, G educational results is verified.

Exam (60% of the course evaluation)

The exam consists of two parts:

- from an independent exam written work, solution of a programming task in an integrated development environment, and defense of this solution (50% of the course evaluation). By solving and evaluating the problem task from the independent exam written work and defending this solution, the achieved level of the B, C, D, E, F, G, H educational results is verified.
- from the oral part, where students answer theoretical questions from a syntax of the C++ language, the principles and functioning of selected searching, sorting, encryption, numerical algorithms, and from the principles and functioning of more complex data structures, such as e.g., two-dimensional regular and irregular dynamic arrays and one-way linked list (10% of the course evaluation). The oral part of the exam and its evaluation verifies the achieved level of the A, B and C educational results.

Student workload:

Total study load (in hours): $6 \text{ credits } \times 26 \text{ hours} = 156 \text{ hours}$

Distribution of study load

Participation in seminars: 52 hours Preparation for seminars: 26 hours Written assignments: 12 hours

Preparation for written work: 18 hours

Exam preparation: 48 hours

Teaching results:

After completing the course, students should be able to:

A understand syntactic basics of the C++ language and semantic basics of object-oriented approach to creating source codes of C++ programs in integrated development environment

B be familiar with the principles and functioning of selected searching, sorting, encryption, numerical algorithms, and they should be able to implement these algorithms in C++ programs

C be familiar with the principles and functioning of more complex data structures, such as e.g., two-dimensional regular and irregular dynamic arrays and one-way linked list, and they should be able to implement these data structures in C++ programs

D analyse the assignment of the programming task, design an algorithm for its solution and implement the proposed algorithm using the syntactic rules of the C++ language and the object-oriented paradigm into the source code solving the assigned programming task

E select a suitable data structure for storing data of this algorithm for the proposed algorithm for solving the assigned task

F analyse the behaviour of the final program with an implemented algorithm using the specified data structure using the integrated development environment debugger, for test input data

G build the final program for the target operating system and the target hardware platform from the tested source code of the program solving the assigned programming task

H present and defend the proposed solutions to the assigned programming tasks at a professional level

I prepare a technical documentation (a report) describing their proposed solution to the assigned programming task

Indicative content:

- 1 Basic concepts of object-oriented programming
- 2 Other programming techniques and features of oriented programming
- 3 Working with data streams using library classes objects in a program created in C++, inherited hierarchy of library classes for working with data streams
- 4 Inheritance, polymorphism, and composition of objects in an object-oriented C++ program
- 5 Dynamic allocation and deallocation of memory, arrays and pointers, address arithmetic and references in C++ program
- 6 Algorithms, groups (types) of algorithms
- 7 Complexity (computational complexity) of algorithms
- 8 Selected searching algorithms, their principles and operation in the C++ program
- 9 Selected sorting algorithms, their principles and operation in the C++ program
- 10 One-way linked list, its principle and operation in the C++ program
- 11 Selected methods of information encryption, their principles and operation in the C++ program
- 12 Selected algorithms of a numerical differentiation of mathematical functions, their principles and operation in the C++ program
- 13 Selected algorithms of a numerical integration of mathematical functions, their principles and operation in the C++ program

Support literature:

STROUSTRUP, B. Programovací jazyk C++. Praha: BEN - technická literatura, 1997. ISBN 80-86056-20-1

ECKEL, B. Myslíme v jazyku C++. Praha: Grada, 2000. ISBN 8024790092

ECKEL, B. Myslíme v jazyku C++, 2. díl. Praha: Grada, 2006. ISBN 8024710153

SCHILDT, H. Nauč se sám C++. Praha: SoftPress, 2001. ISBN 8086497135

GLASSBOROW, F. Naučte se programovat! podrobný průvodce programováním v C++. Praha: Grada, 2005. ISBN 80-247-1243-1

VIRIUS, M. Programování v C++. Praha: Grada, 2017. ISBN 978-80-271-0502-1

VIRIUS, M. Programovací jazyk C++ 2. díl. Praha: ČVUT Praha, 2016. ISBN 978-80-01-06050-6

VIRIUS, M. Programovací jazyk C++ 3. díl. Praha: ČVUT Praha, 2017. ISBN 978-80-01-06089-6

VIRIUS, M. Od C k C++. České Budějovice: Kopp, 2004. ISBN 80-7232-110-2

VIRIUS, M. Jazyky C a C++. Praha: Grada, 2011. ISBN 9788024739175

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 665

A	В	С	D	Е	FX
4.96	7.22	13.68	31.43	35.94	6.77

Lecturer: doc. Ing. Jaroslav Kultan, PhD., Ing. Igor Košťál, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Artificial Intelligence and Expert Systems

FHI/IIA21170/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 2 **Per course:** 0 / 26

Method of study: present

Number of credits: 4

Recommended semester/trimester of study: 5.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Requirements to complete the course:

- final exam - written form, 60% (passing the exam means obtaining 51% from the evaluation of exam) The exam consists of two parts: verification of theoretical knowledge (test with different types of questions). The theoretical part verifies the achieved level of educational results A., D, E, F, G. Verification of practical skills (program creation in CLIPS), where the level of educational results B, C, H is verified.

Seminars

- individual work and continous tests 15%,
- working in small teams: elaboration and seminar topic presentation 10%, work over the final project 15%

Together: 40%

By evaluating individual work and evaluating work in teams, the following educational results are developed and evaluated: B., C., D., G., H.

Student workload:

Total study load (in hours):

3 credits x 26 hours= 78 hours

Study load distribution:

Seminar participation: 26 hours Preparation for seminars: 8 hours Project preparation: 10 hours

Preparation for the final exam: 34 hours

Teaching results:

After studying this course, students gain the knowledge and should be able to:

- A. have an orientation in the field of Artificial Intelligence and its use in business practice
- B. understand the principles of declarative programming and the differences in the creation of such a program compared to procedural programming;
- C. understand the needs of different representations of knowledge in AI so that they can be easily processed through IT for non-deterministic decision-making tasks.
- D. distinguish knowledge tasks in practice, analyze them and suggest a type of system that could solve them;

- E. have an orientation in the use of knowledge and expert systems in practice with regard to their basic functions;
- F. understand the basic techniques of acquiring knowledge from a domain expert and the life cycle of creating an expert system in business practice;
- G. answer the basic questions of knowledge engineering in the deployment of systems in practice;
- H. create simple programs in a language that supports the rule paradigm and understand the connection with interfaces to applications created in other programming languages;

Indicative content:

- 1. Introduction to artificial intelligence, history, new technologies, the importance of artificial intelligence in practice.
- 2. Definition of the terms data, information, knowledge, competencies in the company and their connection with the structuring in informatics. Programming introduction in CLPS
- 3. The concept of knowledge agent, the principles of its operation and the basic architecture of the agent, declarative programming. Differences between declarative and structured programming.
- 4. State space search, basic search algorithms and their connection with the operation of the knowledge agent. Relationship between state space search and the CLIPS environment.
- 5. Knowledge base and knowledge representation, types of knowledge representations from logic to rule-based systems. Working with rule-based systems and lists (multifield values) in CLIPS. Comparing patterns for multifield values, examining the conditions in the rule.
- 6. From semantic networks and frame-based knowledge representation to object system modeling. Use of knowledge representations in informatics. Creating frames and classes in CLIPS and the basic multifield functions.
- 7. Knowledge tasks classification and their characteristics. Knowledge and expert systems, differences in architecture. Explanatory module and its meaning in ES. User functions in CLIPS, calling them and using them in rules.
- 8. Expert systems and introduction to knowledge engineering. Importance of Expert Systems in practice (e.g. Business rule Engine). Explanatory artificial intelligence and its importance in machine learning.
- 9. Creating examples in the COOL environment, classes, instances and sending messages between classes, the basic OO philosophy of modeling in artificial intelligence and its meaning, pattern-matching with objects.
- 10. Non-standard functions in CLIPS, their use in specific examples (forall, exists, foreach, do-forall-facts, etc.) Comparison of different solutions in examples.
- 11. Programming trees using rules, the influence of rule conditions on program operation, preparation of tasks for projects. Management tasks such as planning, scheduling, diagnostics, prediction, assignment, evaluation and their modeling.
- 12. Working in groups on final projects, working with modeling of knowledge engineering.
- 13. Presentation of group final projects. Examples of professional tools for developing expert systems.

Support literature:

- 1. Návrat, P. a kol. Umelá inteligencia, STU, Edícia učebných textov informatiky a informačných technológií, 2011
- 2. Kelemen, J. Pozvanie do znalostnej spoločnosti, IURA Edition, 2007
- 3. Dvořák, J., Expertní systémy, 2004. Dostupné na: http://www.uai.fme.vutbr.cz/~jdvorak/Opory/ExpertniSystemy.pdf (dostupné 21.10.2021)
- 4. Svátek, V. Ontologie a www. Dostupné na: http://nb.vse.cz/~svatek/onto-www.pdf (dostupné 20.10.2021)
- 5. Riley, G. CLIPS- A Tool for Building Expert Systems, 2013, Dostupné na: http://clipsrules.sourceforge.net/ (dostupné 20.10.2021)

- 6. Negnevitsky, M., Artificial Intelligence A Guide to Intelligent Systems, Pearson, 2011
- 7. Benson, M., Handbook of Expert Systems, Clanrye Intl, 2015
- 8. Norvig, P., Russell, S., Artificial Intelligence: A Modern Approach, Global Edition, 2021
- 9. Elektronický kurz Umelá inteligencia a expertné systémy, LMS Moodle Ekonomickej Univerzity, dsotupné na: https://moodle.euba.sk/course/view.php?id=2

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 528

Total named of evaluated students. 320						
	A	В	С	D	Е	FX
ſ	2.46	8.14	19.51	33.14	35.8	0.95

Lecturer: RNDr. Eva Rakovská, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Bachelor Thesis and its Defense

FHI/IIA21980/22

Type, load and method of teaching activities:

Form of course:

Recommended load of course (number of lessons):

Per week: Per course: Method of study: present

Number of credits: 10

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Student workload:

Teaching results:

Indicative content:

Support literature:

Syllabus:

Language whose command is required to complete the course:

Notes:

Assessment of courses

Total number of evaluated students: 92

A	В	С	D	Е	FX
47.83	26.09	14.13	7.61	4.35	0.0

Lecturer:

Date of the latest change: 31.03.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | Title of course: Blockchain and Digital Currencies

FHI/IIA21210/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 2 **Per course:** 0 / 26

Method of study: present

Number of credits: 4

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Requirements to complete the course:

Continuous problem solving during exercises and activity 20%.

Final task 20%, 51% of this obligation is required for the exam. The following learning outcomes are assessed by the evaluation of projects: E., F., G., H., I., J., K., L.

Final exam - written form, 60% (passing the exam means obtaining at least 51% of the exam evaluation) The test verifies the achieved level of educational results A., B., C., D., E

Student workload:

Total study load (in hours):

3 credits x 26 hours= 78 hours

Study load distribution:

Seminar participation: 26 hours Preparation for seminars: 13 hours Project preparation: 13 hours

Preparation for the final exam: 26 hours

Teaching results:

Teaching results:

After studying this course, students gain the knowledge and should be able to:

- A. Know the conceptual apparatus related to blockchain, digital curencies and cryptoactive, what is Blockchain technology and what is its use?
- B. Know the definitions and technologies related to blockchain, which are blockchain applications
- C. Know the differences between Blockchain and individual implementations of technology
- D. Know blockchain browsers or other associated tools
- E. Explain what cryptocurrency mining is, how it works, and what it is good for? What are the risks associated with cryptoactive assets and how to prevent them?
- F. Analyze cryptoactive and blockchain applications
- G. Use blockchain applications
- H. Manage and store cryptoactive (BTC bitcoin, ETH ether, ...)
- I. Define the use of blockchain technology in other areas and applications
- J. analytically evaluate individual implementations of blockchain technologies,
- K. analytical evaluation of individual implementations in the context of legal and economic aspects,

L. use the skills needed in the design and implementation of blockchain technologies and cryptoactive.

Indicative content:

- 1. Introduction to blockchain, digital curencies and cryptoactive history, principles and definitions.
- 2. Bitcoin protocol
- 3. Ethereum protocol
- 4. Smart contracts
- 5. Alternative cryptoactive
- 6. Cryptomens in the context of macroeconomics
- 7. Second layer technologies Lightning Network, Plasma, State Channels
- 8. Security aspects of blockchain
- 9. Alternative use of blockchain technology
- 10. Blockchain in Enterprise environment
- 11. Security aspects of cryptoactive from the user's point of view
- 12. Economic and legal aspects of cryptoactive and digital names
- 13. Decentralized Finance (DeFi), NFTs, and Metaverse in the Context of Cryptoactive

Support literature:

- 1. HOSP, J.: Kryptomeny Bitcoin, Ethereum, Blockchain, ICO and Co. jednoducho a zrozumiteľne, Tatran, 2018, ISBN 9788022209458
- 2. ANTONOPOULOS A.: Mastering Bitcoin: Programming the Open Blockchain, 2nd edition ISBN: 978-1491954386, Sebastopol: O'Reilly Media 2017
- 3. ANTONOPOULOS A., WOOD G.: Mastering Ethereum: Building Smart Contracts and DApps, ISBN 978-1491971949, Sebastopol: O'Reilly Media 2019
- 4. NARAYANAN A., BONNEAU J., FELTEN E., MILLER A., GOLDFEDER S.: Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction. ISBN: 9781400884155, Princeton University Press 2016
- 5. AMMOUS S. The Bitcoin Standart. The Decentralized Alternative to Central Banking. 2. s., ISBN: ISBN: 978-1-119-47386-2, John Wiley & Sons, Inc. Hoboken, New Jersey, 2018

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 1

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Lecturer: Ing. Veronika Horniaková, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business French for Advanced Students I.

KRaSJ FAJ/ IJE211205/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Homework assignments − 20 %

Results of the final written exam - 60 %

Student workload:

78h:

26 h participation at seminars

26 h preparation for seminars

26 h preparation for exam

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches, conversations, a longer professional text with a complex structure. The student can adequately comment on general and professional topics and clearly formulate ideas and attitudes. In written communication he/she can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Basic types of French business companies
- 2. French companies in Slovakia
- 3. Business communication
- 4. Business letter
- 5. Human resources management
- 6. Recruitment process
- 7. Labour market, unemployment
- 8. Labour market in France and French-speaking countries
- 9. Marketing
- 10. Products and world brands

- 11. Market research
- 12. Internet sales

Obligatory:

Rizeková, I. a kol.: Le monde des affaires, Vydavatel'stvo Ekonóm, Bratislava 2007 Miquel, C.: Grammaire en dialogues. Niveau avancé. B2-C1. CLE International 2013

Supplementary:

Kozmová, J. – Brouland, P.: Francouzština v podnikové a obchodní praxi, Ekopress, Praha 2005 Dahan, L. – Morel, P.:: Maîtrisez le Français Commercial en 40 dossiers, Langues pour tous – Pocket, Paris 2004

Current study materials from magazines, newspapers, and the Internet.

Syllabus:

Language whose command is required to complete the course:

French

Notes:

Assessment of courses

Total number of evaluated students: 2

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Lecturer: Mag. (FH) Florence Gajdošová

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business French for Advanced Students II.

KRaSJ FAJ/ IJE211305/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 10 %

Results of the final exam – 70 %

Student workload:

78h:

26 h participation at seminars

26 h preparation for seminars

26 h preparation for exam

Teaching results:

Language knowledge: mastering the basic principles of professional language

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches and conversations, understands a longer professional text with a complex structure, is able to comment adequately on general and professional topics and clearly formulate ideas and attitudes. In written communication the student can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible, fluent and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Trends in the development of the current economy
- 2. Trends in the development of the economy in French-speaking countries
- 3. Company management
- 4. Company revenues and expenditures
- 5. Company budget
- 6. Subsidies for business development
- 7. Tax system
- 8. Banking system
- 9. Banking products

- 10. Foreign trade
- 11. Foreign investment
- 12. Logistics and transport

Obligatory:

Rizeková, I. a kol.: Le monde des affaires, Vydavatel'stvo Ekonóm, Bratislava 2007

Miquel, C.: Grammaire en dialogues. Niveau avancé. B2-C1. CLE International 2013

Supplementary:

Kozmová, J. – Brouland, P.: Francouzština v podnikové a obchodní praxi, Ekopress, Praha 2005

Dahan, L. – Morel, P.:: Maîtrisez le Français Commercial en 40 dossiers, Langues pour tous –

Pocket, Paris 2004

Current study materials from magazines, newspapers, and the Internet.

Syllabus:

Language whose command is required to complete the course:

French

Notes:

Assessment of courses

Total number of evaluated students: 2

A	В	C	D	Е	FX
50.0	50.0	0.0	0.0	0.0	0.0

Lecturer: PaedDr. Ján Keresty, PhD., Mag. (FH) Florence Gajdošová

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business French for Intermediate Students I.

KRaSJ FAJ/ IJE210905/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Homework assignments − 20 %

Results of the final written exam – 60 %

Student workload:

78h:

26 h participation at seminars

26 h preparation for seminars

26 h preparation for exam

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level and is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for private and professional life.

Language competencies: effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Curriculum vitae
- 2. Cover letter
- 3. Recruitment process
- 4. Job interview
- 5. Hiring a new employee
- 6. Work environment
- 7. Mail communication
- 8. Telephone communication
- 9. Advertising
- 10. Marketing
- 11. Product
- 12. Brand

Obligatory:

Dubois, A.-L. – Tauzin, B.: Objectif Express 2. Hachette Livre Paris 2009

Miquel, C.: Grammaire en dialogues. Niveau intermédiaire. B1. CLE International 2018 Supplementary:

Rizeková, I. a kol.: Le monde des affaires, Vydavatel'stvo Ekonóm, Bratislava 2007

Kozmová, J. – Brouland, P.: Francouzština v podnikové a obchodní praxi, Ekopress, Praha 2005 Complementary articles from the current French press and the Internet.

Syllabus:

Language whose command is required to complete the course:

French

Notes:

Assessment of courses

Total number of evaluated students: 12

A	В	С	D	Е	FX
16.67	25.0	33.33	25.0	0.0	0.0

Lecturer: PhDr. Iveta Rizeková, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business French for Intermediate Students II.

KRaSJ FAJ/ IJE211005/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 4.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments − 10 %

Results of the final exam – 70 %

Student workload:

78h:

26 h participation at seminars

26 h preparation for seminars

26 h preparation for exam

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level and is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for private and professional life.

Language competencies: effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Workplace relations, work team
- 2. Corporate culture
- 3. Work meeting
- 4. Preparing a business trip (transport, accommodation, meals)
- 5. Business trip
- 6. Company presentation
- 7. Product presentation
- 8. Negotiations with partners
- 9. Conclusion of a business contract
- 10. Withdrawal from a contract
- 11. Complaint and claim
- 12. Organizing a congress / a trade fair

Povinná:

Dubois, A.-L. – Tauzin, B.: Objectif Express 2. Hachette Livre Paris 2009

Miquel, C.: Grammaire en dialogues. Niveau intermédiaire. B1. CLE International 2018 Odporúčaná:

Rizeková, I. a kol.: Le monde des affaires, Vydavatel'stvo Ekonóm, Bratislava 2007

Kozmová, J. – Brouland, P.: Francouzština v podnikové a obchodní praxi, Ekopress, Praha 2005 Doplnkové články zo súčasnej francúzskej tlače a z internetu.

Syllabus:

Language whose command is required to complete the course:

French

Notes:

Assessment of courses

Total number of evaluated students: 6

A	В	С	D	Е	FX
16.67	50.0	33.33	0.0	0.0	0.0

Lecturer: PaedDr. Ján Keresty, PhD., PhDr. Iveta Rizeková, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KNJ **Title of course:** Business German for Advanced Students I.

FAJ/IJD21101/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

The result of a homework – 20 %

The result of a final written test -60 %

Student workload:

78h

(participation in seminars 26 h, preparation for seminars 26 h, preparation for the exam 26 h)

Teaching results:

Language knowledge: to know the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level. He/ she understands longer speeches, conversations, a longer professional text with a complex structure. The student can adequately comment on general and professional topics and clearly formulate ideas and attitudes. In written communication he/she can create clear, well-arranged, and detailed text on complex topics, demonstrating mastery of compositional techniques, conjunctions, and means of cohesion.

Language competencies: to use flexibly and effectively acquired language skills, which are necessary for successful student's application in practice and for social, academic, or professional purposes.

- 1. Internal and external communication in business
- 2. Brainstorming
- 3. Trends in the development of the current economy
- 4. Relationships at the workplace
- 5. Marketing
- 6. World brands
- 7. Company
- 8. Networking
- 9. Negotiations
- 10. Insurance
- 11. Types of insurance policies
- 12. Case study

Müller, A., Schlüter, S.: Im Beruf Neu - Kursbuch, Sprachniveau B1+/B2, Hueber Verlag, ISBN 978-3-19-201190-0

Müller, A., Schlüter, S.: Im Beruf Neu – Arbeitsbuch, Sprachniveau B1+/B2, Hueber Verlag, ISBN 978-3-19-201190-7

Syllabus:

Language whose command is required to complete the course:

German

Notes:

Assessment of courses

Total number of evaluated students: 7

A	В	С	D	Е	FX
28.57	14.29	28.57	0.0	14.29	14.29

Lecturer: Christina Hintersteininger, M.A., PhDr. Lucia Šukolová, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KNJ | **Title of course:** Business German for Advanced Students II.

FAJ/IJD21102/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

The result of a homework – 10 %

The result of a final written and oral exam -70 %

Student workload:

78h

(participation in seminars 26 h, preparation for seminars 26 h, preparation for the exam 26 h)

Teaching results:

Language knowledge: to know the basic principles of professional language

Language skills: the student is able to use receptive and productive language skills at the required level. He/ she understands longer speeches and conversations; understands a longer professional text with a complex structure; is able to comment adequately on general and professional topics and clearly formulate ideas and attitudes. In written communication the student can create clear, well-arranged and detailed text on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: to use flexibly, fluently and effectively acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- . Risk management
- 2. Solving conflicts
- 3. Building relationships at the workplace
- 4. Characteristics of a successful manager
- 5. Finances
- 6. Acquisitions
- 7. Mergers
- 8. Joint venture
- 9. Negotiations
- 10. Trends in the development of the economy
- 11. Presentations
- 12. Case study

Müller, A., Schlüter, S.: Im Beruf Neu - Kursbuch, Sprachniveau B1+/B2, Hueber Verlag, ISBN 978-3-19-201190-0

Müller, A., Schlüter, S.: Im Beruf Neu – Arbeitsbuch, Sprachniveau B1+/B2, Hueber Verlag, ISBN 978-3-19-201190-7

Syllabus:

Language whose command is required to complete the course:

German

Notes:

Assessment of courses

Total number of evaluated students: 4

A	В	С	D	Е	FX
0.0	75.0	0.0	25.0	0.0	0.0

Lecturer: Christina Hintersteininger, M.A.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KNJ **Title of course:** Business German for Graduate Students II.

FAJ/IJD21104/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 4.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

The result of a homework – 10 %

The result of a final written and oral exam -70%

Student workload:

78h

(participation in seminars 26 h, preparation for seminars 26 h, preparation for the exam 26 h)

Teaching results:

Language knowledge: to know the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level, is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for the private and professional life.

Language competencies: to use effectively acquired language skills, which are necessary for the successful student's application in practice and for social, academic or professional purposes.

Indicative content:

- 1. Stress at workplace
- 2. Socialising
- 3. Small talk
- 4. Trade sector
- 5. Numerals
- 6. Marketing
- 7. Marketing campaign
- 8. Marketing mix
- 9. Finances
- 10. Making phone calls
- 11. Meetings
- 12. Case study

Support literature:

ROS, Lourdes. Perspektive Deutsch, Kommunikation am Arbeitsplatz A2/B1+, Kursbuch mit Audio-CD, Klett, ISBN 978-3-12-675348-7

ROS, Lourdes. Perspektive Deutsch, Kommunikation am Arbeitsplatz A2/B1+, Übungsbuch, Klett, ISBN 978-3-12-675347-0

KUNOVSKÁ, Ingrid - MRÁZOVÁ, Mária - KUCHAROVÁ, Jana. Teória, cvičenia a texty k nemeckej gramatike. 1. vyd. Bratislava : Vydavateľstvo EKONÓM, 2016. ISBN 978-80-225-4253-1

Syllabus:

Language whose command is required to complete the course:

German

Notes:

Assessment of courses

Total number of evaluated students: 133

A	В	С	D	Е	FX
26.32	20.3	24.81	17.29	9.02	2.26

Lecturer: Mgr. Zuzana Kočišová, Mgr. Ing. Terézia Ondrušová, PhD., Ing. Mgr. Magdaléna Paté, PhD., PhDr. Lucia Šukolová, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KNJ | **Title of course:** Business German for Intermediate Students I.

FAJ/IJD21103/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

The result of a homework − 20 %

The result of a final written test -60 %

Student workload:

78h

(participation in seminars 26 h, preparation for seminars 26 h, preparation for the exam 26 h)

Teaching results:

Language knowledge: to know the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level, is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for the private and professional life.

Language competencies: to use effectively acquired language skills, which are necessary for the successful student's application in practice and for social, academic or professional purposes.

Indicative content:

- 1. Career plan
- 2. Job interview
- 3. Company structure
- 4. Company presentation
- 5. Problem solving in a company
- 6. Negotiations
- 7. Sales
- 8. Company management
- 9. Negotiations
- 10. Making phone calls
- 11. Brainstorming
- 12. Meetings

Support literature:

ROS, Lourdes. Perspektive Deutsch, Kommunikation am Arbeitsplatz A2/B1+, Kursbuch mit Audio-CD, Klett, ISBN 978-3-12-675348-7

ROS, Lourdes. Perspektive Deutsch, Kommunikation am Arbeitsplatz A2/B1+, Übungsbuch, Klett, ISBN 978-3-12-675347-0

KUNOVSKÁ, Ingrid - MRÁZOVÁ, Mária - KUCHAROVÁ, Jana. Teória, cvičenia a texty k nemeckej gramatike. 1. vyd. Bratislava : Vydavateľstvo EKONÓM, 2016. ISBN 978-80-225-4253-1

Syllabus:

Language whose command is required to complete the course:

German

Notes:

Assessment of courses

Total number of evaluated students: 241

A	В	С	D	Е	FX
18.67	22.82	21.99	20.75	14.52	1.24

Lecturer: Mgr. Zuzana Kočišová, Mgr. Ing. Terézia Ondrušová, PhD., Ing. Mgr. Magdaléna Paté, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Italian for Advanced Students I.

KRaSJ FAJ/ IJE211202/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 20 %

Results of final written exam – 60 %

Student workload:

78 hours

26 hours – Seminars participation

26 hours – Seminars preparation

26 hours – Exam preparation

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches, conversations, a longer professional text with a complex structure. The student can adequately comment on general and professional topics and clearly formulate ideas and attitudes. In written communication he/she can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Basic types of Italian business companies
- 2. Italian companies in Slovakia
- 3. Business communication
- 4. Business letter
- 5. Human resources management
- 6. Recruitment process
- 7. Labour market, unemployment
- 8. Labour market in Italy
- 9. Marketing
- 10. Products and world brands

- 11. Market research
- 12. Internet sales

Cherubini, N: Convergenze: Iperlibro di italiano per affari. Roma: Bonacci editore, 2012

Pelizza, G. – Mezzadri, M.: L'italiano in azienda. Perugia: Guerra Edizioni, 2002

Complementary articles from the current Italian press and the Internet.

Syllabus:

Language whose command is required to complete the course:

Italian

Notes:

Assessment of courses

Total number of evaluated students: 1

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Lecturer: Mgr. Elena Smoleňová, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Italian for Advanced Students II.

KRaSJ FAJ/ IJE211302/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 10 %

Results of final exam (combined examination) – 70 %

Student workload:

78 h

26 hours – Seminar participation

26 hours – Seminar preparation

26 hours – Exam preparation

Teaching results:

Language knowledge: mastering the basic principles of professional language

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches and conversations, understands a longer professional text with a complex structure, is able to comment adequately on general and professional topics and clearly formulate ideas and attitudes. In written communication the student can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible, fluent and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Trends in the development of the current economy
- 2. Trends in the development of the Italian economy
- 3. Company management
- 4. Company revenues and expenditures
- 5. Company budget
- 6. Subsidies for business development
- 7. Tax system
- 8. Banking system
- 9. Banking products

- 10. Foreign trade
- 11. Foreign investment
- 12. Logistics and transport

Cherubini, N: Convergenze: Iperlibro di italiano per affari. Roma:Bonacci editore, 2012 Pelizza, G. – Mezzadri, M.: L'italiano in azienda. Perugia:Guerra Edizioni, 2002 Complementary articles from the current Italian press and the Internet.

Syllabus:

Language whose command is required to complete the course:

Italian

Notes:

Assessment of courses

Total number of evaluated students: 1

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Lecturer: Mgr. Elena Smoleňová, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Italian for Intermediate Students I.

KRaSJ FAJ/ IJE210902/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 20 %

Results of the final written exam -60 %

Student workload:

78 hours

26 hours – Seminars participation

26 hours – Seminars preparation

26 hours – Exam preparation

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level and is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for private and professional life.

Language competencies: effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Curriculum vitae
- 2. Cover letter
- 3. Recruitment process
- 4. Job interview
- 5. Hiring a new employee
- 6. Work environment
- 7. Mail communication
- 8. Telephone communication
- 9. Advertising
- 10. Marketing
- 11. Product
- 12. Brand

Cherubini, N: Convergenze: Iperlibro di italiano per affari. Roma: Bonacci editore, 2012 Pelizza, G. – Mezzadri, M.: L'italiano in azienda. Perugia: Guerra Edizioni, 2002 Complementary articles from the current Italian press and the Internet.

Syllabus:

Language whose command is required to complete the course:

Italian

Notes:

Assessment of courses

Total number of evaluated students: 19

A	В	С	D	Е	FX
52.63	31.58	10.53	0.0	0.0	5.26

Lecturer: Mgr. Elena Smoleňová, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Italian for Intermediate Students II.

KRaSJ FAJ/ IJE211002/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 4.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 10 %

Results of the final exam (written and oral) -70 %

Student workload:

78 hours

26 hours – Seminars participation

26 hours – Seminar preparation

26 hours – Exam preparation

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level and is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for private and professional life.

Language competencies: effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Workplace relations, work team
- 2. Corporate culture
- 3. Work meeting
- 4. Preparing a business trip (transport, accommodation, meals)
- 5. Business trip
- 6. Company presentation
- 7. Product presentation
- 8. Negotiations with partners
- 9. Conclusion of a business contract
- 10. Withdrawal from a contract
- 11. Complaint and claim
- 12. Organizing a congress / a trade fair

Cherubini, N: Convergenze: Iperlibro di italiano per affari. Roma:Bonacci editore, 2012 Pelizza, G. – Mezzadri, M.: L'italiano in azienda. Perugia:Guerra Edizioni, 2002 Complementary articles from the current Italian press and the Internet.

Syllabus:

Language whose command is required to complete the course:

Italian

Notes:

Assessment of courses

Total number of evaluated students: 13

A	В	С	D	Е	FX
46.15	38.46	15.38	0.0	0.0	0.0

Lecturer: Mgr. Elena Smoleňová, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Russian for Advanced Students I.

KRaSJ FAJ/ IJE211203/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 20 %

Results of a final written exam – 60 %

Student workload:

26 h participation in seminars

26 h semester project

26 h written work

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches, conversations, a longer professional text with a complex structure. The student can adequately comment on general and professional topics and clearly formulate ideas and attitudes. In written communication he/she can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Economic system basic concepts.
- 2. Economic systems general economic theory.
- 3. World economy.
- 4. Domestic economy.
- 5. Market.
- 6. Principles of market economy.
- 7. Marketing.
- 8. Enterprise and business.
- 9. Finance and costs of the company.
- 10. Personnel policy of the company.
- 11. Corporate culture.

12. Solution of a case study.

Support literature:

RECHTORÍKOVÁ, G. 2014. Ruština pre ekonómov I. Bratislava: Vydavateľstvo EKONÓM. STRELKOVÁ, K. et al. 2011. Sprievodca ekonomickou lexikou. Bratislava: Vydavateľstvo EKONÓM.

Syllabus:

Language whose command is required to complete the course:

Russian

Notes:

Assessment of courses

Total number of evaluated students: 1

A	В	С	D	Е	FX
0.0	0.0	0.0	100.0	0.0	0.0

Lecturer: doc. Marina Vazanova, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Russian for Advanced Students II.

KRaSJ FAJ/ IJE211303/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Presentation of a project – 10 %

The result of a written and oral exam -70%

Student workload:

26 h participation in seminars

26 h semester project

26 h written work

Teaching results:

Language knowledge: mastering the basic principles of professional language

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches and conversations, understands a longer professional text with a complex structure, is able to comment adequately on general and professional topics and clearly formulate ideas and attitudes. In written communication the student can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible, fluent and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Enterprise and business II.
- 2. License and Franchising.
- 3. Management.
- 4. Ethics and communication in business
- 5. Economy of the Slovak Republic overview.
- 6. Economy of the Russian Federation an overview.
- 7. Slovak-Russian joint ventures II.
- 8. Business negotiations in general.
- 9. Resolution of trade conflicts.
- 10. Business contract.

- 11. Russian business partner characteristics, differences.
- 12. Case study solution

RECHTORÍKOVÁ, G. 2014. Ruština pre ekonómov I. Bratislava: Vydavateľstvo EKONÓM. STRELKOVÁ, K. et al. 2011. Sprievodca ekonomickou lexikou. Bratislava: Vydavateľstvo EKONÓM.

Syllabus:

Language whose command is required to complete the course:

Russian

Notes:

Assessment of courses

Total number of evaluated students: 0

A	В	С	D	Е	FX
0.0	0.0	0.0	0.0	0.0	0.0

Lecturer: doc. Marina Vazanova, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Russian for Intermediate Students I.

KRaSJ FAJ/ IJE210903/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 20 %

Results of a final written exam – 60 %

Student workload:

26 h participation in seminars

26 h semester project

26 h written work

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level and is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for private and professional life.

Language competencies: effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. How to get a job?
- 2. Work, job opportunities.
- 3. Profession.
- 4. Curriculum vitae and personal documents.
- 5. Curriculum vitae.
- 6. Cover letter.
- 7. Job interview.
- 8. Establishment of the company name, logo, contact details.
- 9. Company history.
- 10. Vacancies in the company.
- 11. Employee requirements.
- 12. Semester project.

DZIVÁKOVÁ, M. 2020. Ruský jazyk pre mierne pokročilých I. Bratislava: Vydavateľstvo EKONÓM.

STRELKOVÁ, K. et al. 2011. Sprievodca ekonomickou lexikou. Bratislava: Vydavateľstvo EKONÓM.

Syllabus:

Language whose command is required to complete the course:

Russian

Notes:

Assessment of courses

Total number of evaluated students: 70

A	В	C	D	Е	FX
42.86	32.86	17.14	2.86	4.29	0.0

Lecturer: Mgr. Michaela Dziváková, PhD., doc. PhDr. Mgr. Tatjana Grigorjanová, CSc.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Russian for Intermediate Students II.

KRaSJ FAJ/ IJE211003/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 4.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 10 %

Results of a final written test and oral exam – 70 %

Student workload:

26 h participation in seminars

26 h semester project

26 h written work

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level and is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for private and professional life.

Language competencies: effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Getting to know the company.
- 2. Reason for founding a company.
- 3. Company goals.
- 4. Characteristics of the company.
- 5. Limited Liability Companies.
- 6. Joint stock companies.
- 7. Company activity.
- 8. Business plan.
- 9. Company structure.
- 10. Provided products and services of the company.
- 11. Slovak-Russian joint ventures.
- 12. Semester project.

DZIVÁKOVÁ, M. 2020. Ruský jazyk pre mierne pokročilých I. Bratislava: Vydavateľstvo EKONÓM.

STRELKOVÁ, K. et al. 2011. Sprievodca ekonomickou lexikou. Bratislava: Vydavateľstvo EKONÓM.

Syllabus:

Language whose command is required to complete the course:

Russian

Notes:

Assessment of courses

Total number of evaluated students: 54

A	В	С	D	Е	FX
48.15	16.67	20.37	9.26	5.56	0.0

Lecturer: Mgr. Michaela Dziváková, PhD., doc. PhDr. Mgr. Tatjana Grigorjanová, CSc.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Slovak for Advanced Students I.

KRaSJ FAJ/ IJE211201/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 20 %

Results of a final written test and oral exam - 60 %

Student workload:

26 h participation in seminars

26 h semester project

26 h written work

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches, conversations, a longer professional text with a complex structure. The student can adequately comment on general and professional topics and clearly formulate ideas and attitudes. In written communication he/she can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Internal communication.
- 2. External communication.
- 3. Communication in the workplace.
- 4. Trends in economic development.
- 5. What exactly is economics?
- 6. Products and the world of the brand.
- 7. Enterprise and business.
- 8. Company costs and company finances.
- 9. Business plan.
- 10. Marketing.
- 11. Management.

12. Case study.

Support literature:

KVAPIL, R. 2016. Slovenčina pre ekonómov I. Bratislava: Vydavateľstvo EKONÓM. ISBN 978-80-225-4286-9

Syllabus:

Language whose command is required to complete the course:

Slovak

Notes:

Assessment of courses

Total number of evaluated students: 26

A	В	С	D	Е	FX
30.77	23.08	15.38	23.08	7.69	0.0

Lecturer: PhDr. Roman Kvapil, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Slovak for Advanced Students II.

KRaSJ FAJ/ IJE211301/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework assignments – 10 %

Results of a final written test and oral exam – 70 %

Student workload:

26 h participation in seminars

26 h semester project

26 h written work

Teaching results:

Language knowledge: mastering the basic principles of professional language

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches and conversations, understands a longer professional text with a complex structure, is able to comment adequately on general and professional topics and clearly formulate ideas and attitudes. In written communication the student can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible, fluent and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. How to get a job?
- 2. Profession and requirements for the performance of the profession.
- 3. Obligations of the employer and the employee.
- 4. Job interview.
- 5. Official letters and advertisements.
- 6. Application, CV and resignation.
- 7. Business correspondence.
- 8. STN standards for writing official letters.
- 9. Communication in the bank.
- 10. Communication at the post office.

- 11. Communication at the Foreign Police.
- 12. Case study.

KVAPIL, R., ULIČNÁ, M. 2018. Slovenčina pre ekonómov II. Bratislava: Vydavateľstvo EKONÓM. ISBN 978-80-225-4487-0.

Syllabus:

Language whose command is required to complete the course:

Slovak

Notes:

Assessment of courses

Total number of evaluated students: 8

A	В	С	D	Е	FX
0.0	37.5	37.5	25.0	0.0	0.0

Lecturer: PhDr. Roman Kvapil, PhD., PaedDr. Ján Keresty, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Spanish for Advanced Students I.

KRaSJ FAJ/ IJE211204/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

20 % Activity at seminars

20 % Homework assignments

60 % Results of the final written exam

Student workload:

78h

26h participation in the seminars

26h preparation for the seminars

26h preparation for the exam

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches, conversations, a longer professional text with a complex structure. The student can adequately comment on general and professional topics and clearly formulate ideas and attitudes. In written communication he/she can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Basic types of Spanish business companies
- 2. Spanish companies in Slovakia
- 3. Business communication
- 4. Business letter
- 5. Human resources management
- 6. Recruitment process
- 7. Labour market, unemployment
- 8. Labour market in Spain and Spanish-speaking countries
- 9. Marketing
- 10. Products and world brands

- 11. Market research
- 12. Internet sales

de Prada, M., Bovet, M. & Marcé, P. Entorno empresarial. Edelsa, 2014

Spišiaková, M., Varela Cano, D.P., Tužinská, S. Pavliková, Ž. Španielsky jazyk pre ekonómov, diplomatov a mediátorov 2. Tribun EU s.r.o, 2020

Etapas plus. C1. VVAA (2019). Etapas Plus. C1. Edinumen

Kol.autorov Lingea, Lexicon 7 Španielsky ekonomický slovník. ISBN: 978-80-7508-576-4 Current study materials from magazines, newspapers, and the Internet.

Syllabus:

Language whose command is required to complete the course:

Spanish

Notes:

Assessment of courses

Total number of evaluated students: 0

A	В	С	D	Е	FX
0.0	0.0	0.0	0.0	0.0	0.0

Lecturer:

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Spanish for Advanced Students II.

KRaSJ FAJ/ IJE211304/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

20 % activity at seminars

10 % presentation of a project

70 % the result of a written and oral exam

Student workload:

78h

26h participation in the seminars

26h preparation for the seminars

26h preparation for the exam

Teaching results:

Language knowledge: mastering the basic principles of professional language

Language skills: the student is able to use receptive and productive language skills at the required level. He/she understands longer speeches and conversations, understands a longer professional text with a complex structure, is able to comment adequately on general and professional topics and clearly formulate ideas and attitudes. In written communication the student can create clear, well-arranged and detailed texts on complex topics, demonstrating mastery of compositional techniques, conjunctions and means of cohesion.

Language competencies: flexible, fluent and effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Trends in the development of the current economy
- 2. Trends in the development of the economy in Spanish-speaking countries
- 3. Company management
- 4. Company revenues and expenditures
- 5. Company budget
- 6. Subsidies for business development
- 7. Tax system
- 8. Banking system
- 9. Banking products

- 10. Foreign trade
- 11. Foreign investment
- 12. Logistics and transport

de Prada, M., Bovet, M. & Marcé, P. Entorno empresarial. Edelsa, 2014

Spišiaková, M., Varela Cano, D.P., Tužinská, S. Pavliková, Ž. Španielsky jazyk pre ekonómov, diplomatov a mediátorov 2. Tribun EU s.r.o, 2020

Etapas plus. C1. VVAA (2019). Etapas Plus. C1. Edinumen

Kol.autorov Lingea, Lexicon 7 Španielsky ekonomický slovník. ISBN: 978-80-7508-576-4

Current study materials from magazines, newspapers, and the Internet.

Syllabus:

Language whose command is required to complete the course:

Spanish

Notes:

Assessment of courses

Total number of evaluated students: 0

A	В	С	D	Е	FX
0.0	0.0	0.0	0.0	0.0	0.0

Lecturer:

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Spanish for Intermediate Students I.

KRaSJ FAJ/ IJE210904/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

20 % activity at seminars

20 % assessment of homework assignments

60 % results of the final written exam

Student workload:

78h

26h participation in the seminars

26h preparation for the seminars

26h preparation for the exam

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level and is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for private and professional life.

Language competencies: effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Curriculum vitae
- 2. Cover letter
- 3. Recruitment process
- 4. Job interview
- 5. Hiring a new employee.
- 6. Work environment
- 7. Mail communication
- 8. Telephone communication
- 9. Advertising
- 10. Marketing
- 11. Product
- 12. Brand

Spišiaková, M., Varela Cano, D.P., Tužinská, S. Pavliková, Ž. Španielsky jazyk pre ekonómov, diplomatov a mediátorov 1. Tribun EU s.r.o, 2020

Prada de, M., Marcé, P. Entorno laboral. Edelsa 2017

Kol.autorov Lingea, Lexicon 7 Španielsky ekonomický slovník. ISBN: 978-80-7508-576-4 Current study materials from magazines, newspapers, and the Internet.

Syllabus:

Language whose command is required to complete the course:

Spanish

Notes:

Assessment of courses

Total number of evaluated students: 40

A	В	С	D	Е	FX
22.5	5.0	17.5	17.5	32.5	5.0

Lecturer: Ing. Allan Jose Sequeira Lopez, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Business Spanish for Intermediate Students II.

KRaSJ FAJ/ IJE211004/22

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 4.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

20 % activity at seminars

10 % presentation of a project

70 % the result of a written and oral exam

Student workload:

78h

26h participation in the seminars

26h preparation for the seminars

26h preparation for the exam

Teaching results:

Language knowledge: mastering the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level and is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for private and professional life.

Language competencies: effective use of acquired language skills which are necessary for student's successful application in practice and for social, academic or professional purposes.

- 1. Workplace relations, work team
- 2. Corporate culture
- 3. Work meeting
- 4. Preparing a business trip (transport, accommodation, meals)
- 5. Business trip
- 6. Company presentation
- 7. Product presentation
- 8. Negotiations with partners
- 9. Conclusion of a business contract
- 10. Withdrawal from a contract
- 11. Complaint and claim
- 12. Organizing a congress / a trade fair

Spišiaková, M., Varela Cano, D.P., Tužinská, S. Pavliková, Ž. Španielsky jazyk pre ekonómov, diplomatov a mediátorov 1. Tribun EU s.r.o, 2020

Prada de, M., Marcé, P. Entorno laboral. Edelsa 2017

Kol.autorov Lingea, Lexicon 7 Španielsky ekonomický slovník. ISBN: 978-80-7508-576-4 Current study materials from magazines, newspapers, and the Internet.

Syllabus:

Language whose command is required to complete the course:

Spanish

Notes:

Assessment of courses

Total number of evaluated students: 19

A	В	С	D	Е	FX
26.32	15.79	26.32	10.53	21.05	0.0

Lecturer: Ing. Allan Jose Sequeira Lopez, PhD.

Date of the latest change: 26.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAJ | **Title of course:** CJ 1 - Business English for Advanced Students I.(12)

FAJ/IJA215010/21

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Degree of study: I., N

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework -20 %

The result of a final written test -60 %

Student workload:

78h (participation in seminars 26 h, preparation for seminars 26 h, preparation for the exam 26 h)

Teaching results:

Learning outcomes: Knowledge:

- acquisition of theoretical knowledge of the characteristics and basic features of the English professional language.
- the student can characterise and identify the basic features of professional language in a text and knows the principles of the production of professional economic texts in theoretical and practical terms.

Competences:

- know the basic principles of the functioning of professional language,
- the student can use receptive and productive language skills at the required level,
- understands longer speeches and conversations; understands longer professional texts with a complex structure; can express himself/herself adequately on general and professional topics and formulate ideas and attitudes clearly,
- in writing, can produce clear, well-organized, and detailed text on complex professional economic topics, demonstrating mastery of compositional techniques, connective expressions, and means of cohesion,
- use flexibly and effectively the acquired linguistic knowledge, which is essential for the student's successful application in practice, for professional purposes.

Skills:

- apply the acquired skills in working with professional texts, e.g. seminar papers, final thesis, case studies,
- apply appropriate linguistic strategies related to the production of professional texts (use of appropriate lexical, stylistic, morphosyntactic devices) in the target language,

- acquiring the ability to consciously distinguish appropriate from inappropriate linguistic devices in professional economic communication (colloquial expressions, syntactically incomplete sentences, imprecise, ambivalent expressions, etc.).

Indicative content:

- how inventors think, first impressions, networking
- production and consumption, which includes sharing, renting, reusing, repairing, refurbishing, and recycling existing materials and products for as long as possible, product lifecycle, effective working meetings, decision making, problem-solving
- financial investment, negotiations, marketing, customer relationship
- communication skills, employment trends, conflict resolution
- disruptive factors in business, business ethics, and corporate social responsibility
- brainstorming, meeting management
- case study solving, business workshop

Support literature:

- 1. Dubicka, I., Rosenberg, M., O'Keeffe, M., Dignen, B., Hogan, M. (2020) Business Partner C1. Your Employability Trainer. Harlow: Pearson Education Limited. ISBN 978-1-292-24862-2
- 2. Dubicka, I.O'Keeffe, M. Market Leader Advanced. Pearson Education Limited. 3rd edition. ISBN-13: 978-1408237038
- 3. Trappe, T., Tullis, G. (2016) Intelligent Business Advanced. Pearson Education Limited. 2016 ISBN 978-1-4082-5597-1
- 4. MacKenzie, I. (2010) English for Business Studies. A course for Business Studies and Economics students. Cambridge: Cambridge University Press, 2010. ISBN 978-0-521-74341-9 Doplňujúca literatúra:
- 1. Allison, J., Appleby, R., Chazal de, E. (2009) The Business Advanced. Oxford: Macmillan. ISBN 978-0-230-02151-8
- 2. Baade, K., Holloway, Ch., Hughes, J., Scrivener, J., Turner, R. (2018) Business Results. Advanced. Oxford: Oxford University Press. 2nd edition. ISBN 978-0-19-473906-1.
- 3. Financial Times,
- 4. The Economist

Syllabus:

Language whose command is required to complete the course:

English

Notes:

Assessment of courses

Total number of evaluated students: 502

A	В	С	D	Е	FX
10.36	15.74	19.72	23.31	22.31	8.57

Lecturer: Mgr. Michaela Grinaj, PhD., PaedDr. Darina Halašová, PhD., PaedDr. Zuzana Hrdličková, PhD., Mgr. Ivana Kapráliková, PhD., Ing. Mgr. Sonia Krajčík Danišová, PhD., Mgr. Linda Krajčovičová, PhD., PhDr. Eva Maierová, PhD., PaedDr. Žaneta Pavlíková, PhD., PaedDr. Eva Stradiotová, PhD., Mgr. Natalia Shumeiko, PhD., Dr. habil. PhDr. Ildikó Némethová, PhD., PaedDr. Alexandra Mandáková, PhD., Mgr. Richard Kravec

Date of the latest change: 11.12.2021

Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Andrea Furková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Dr. Ing. Miroslav Hudec, Person responsible for the delivery,

development and quality of the study programme doc. Ing. Martin Mišút, CSc., Person responsible for the delivery, development and quality of the study programme prof. Ing. Ivan Brezina, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Jaroslav Kultan, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAJ | **Title of course:** CJ 1 - Business English for Advanced Students II.(13)

FAJ/IJA215380/21

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 2.

Degree of study: I., N

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework -10 %

The result of a final exam -70 %

Student workload:

78h (participation in seminars 26 h, preparation for seminars 26 h, preparation for the exam 26 h)

Teaching results:

Knowledge:

- acquisition of theoretical knowledge of the characteristics and basic features of the English professional language.
- the student can characterise and identify the basic features of professional language in a text and knows the principles of the production of professional economic texts in theoretical and practical terms.

Competences:

- know the basic principles of the functioning of professional language,
- the student can use receptive and productive language skills at the required level,
- understands longer speeches and conversations; understands longer professional texts with a complex structure; can express himself/herself adequately on general and professional topics and formulate ideas and attitudes clearly,
- in writing, can produce clear, well-organized, and detailed text on complex professional economic topics, demonstrating mastery of compositional techniques, connective expressions, and means of cohesion,
- use flexibly and effectively the acquired linguistic knowledge, which is essential for the student's successful application in practice, for professional purposes.

Skills:

- apply the acquired skills in working with professional texts, e.g. seminar papers, final thesis, case studies,
- apply appropriate linguistic strategies related to the production of professional texts (use of appropriate lexical, stylistic, morphosyntactic devices) in the target language,

- acquiring the ability to consciously distinguish appropriate from inappropriate linguistic devices in professional economic communication (colloquial expressions, syntactically incomplete sentences, imprecise, ambivalent expressions, etc.).

Indicative content:

- marketing strategies, data presentation, relationship building, advertising
- presentation, networking, communication skills
- impact of tourism on the economy, operational consulting, strategy, goals and values
- conflicts in the workplace, conflict resolution
- entrepreneurs, online entrepreneurship, start-ups
- performance evaluation, self-assessment

Support literature:

- 1. Dubicka, I., Rosenberg, M., O'Keeffe, M., Dignen, B., Hogan, M. (2020) Business Partner C1. Your Employability Trainer. Harlow: Pearson Education Limited. ISBN 978-1-292-24862-2
- 2. Dubicka, I.O'Keeffe, M. Market Leader Advanced. Pearson Education Limited. 3rd edition. ISBN-13: 978-1408237038
- 3. Trappe, T., Tullis, G. (2016) Intelligent Business Advanced. Pearson Education Limited. 2016 ISBN 978-1-4082-5597-1
- 4. MacKenzie, I. (2010) English for Business Studies. A course for Business Studies and Economics students. Cambridge: Cambridge University Press, 2010. ISBN 978-0-521-74341-9 Doplňujúca literatúra:
- 1. Allison, J., Appleby, R., Chazal de, E. (2009) The Business Advanced. Oxford: Macmillan. ISBN 978-0-230-02151-8
- 2. Baade, K., Holloway, Ch., Hughes, J., Scrivener, J., Turner, R. (2018) Business Results. Advanced. Oxford: Oxford University Press. 2nd edition. ISBN 978-0-19-473906-1.
- 3. Financial Times,
- 4. The Economist

Syllabus:

Language whose command is required to complete the course:

English

Notes:

Assessment of courses

Total number of evaluated students: 261

A	В	С	D	Е	FX
11.88	20.31	19.54	21.46	13.79	13.03

Lecturer: PhDr. Eva Maierová, PhD., PaedDr. Alexandra Mandáková, PhD., PaedDr. Eva Stradiotová, PhD., PaedDr. Žaneta Pavlíková, PhD., Mgr. Ivana Kapráliková, PhD., Mgr. Linda Krajčovičová, PhD., Mgr. Richard Kravec, Mgr. Natalia Shumeiko, PhD., Mgr. Ján Strelinger, PhD., doc. Svitlana Goloshchuk, PhD., Mgr. Beáta Biliková, PhD.

Date of the latest change: 11.12.2021

Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Andrea Furková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Dr. Ing. Miroslav Hudec, Person responsible for the delivery, development and quality of the study programme doc. Ing. Martin Mišút, CSc., Person responsible for the delivery, development and quality of the study programme prof. Ing. Ivan Brezina,

CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Jaroslav Kultan, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAJ | **Title of course:** CJ 2 - Business English for Intermediate Students I (9)

FAJ/IJA215460/21

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Degree of study: I., N

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework -20 %

Results of a final written test and oral exam – 60 %

Student workload:

78h (participation in seminars 26 h, preparation for seminars 26 h, preparation for the exam 26 h)

Teaching results:

Language knowledge: to know the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level, is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for the private and professional life.

Language competencies: to use effectively acquired language skills, which are necessary for the successful student's application in practice and for social, academic or professional purposes

Indicative content:

- Career plan, organisation, career path
- Job interview, communication skills, work meeting
- Company structure, brand, presentation
- Company presentation, PEST analysis
- Problem solving in the company
- Negotiation, communication skills

Support literature:

Cotton, D., Falvey, D., Kent, S.: Market Leader Intermediate, Pearson Education Limited, Harlow, 2010, ISBN 978-1-4082-3707-6

Cotton, D., Falvey, D., Kent, S.: Market Leader Pre-Intermediate, Pearson Education Limited, Harlow, 2012, ISBN 978-1-408-23695-6

O'Keeffe, M., Lansford, L., Wright, R., Powell, M., Wright, L. Business Partner A2+. Harlow: Pearson Education Limited. 2019. ISBN 978-1-292-23353-6

Dubicka, I., O'Keffee, M., Dignen, B. Hogan, M., Wright, L. Business Partner B1+. Harlow: Pearson Education Limited. 2018. ISBN 978-1-292-23355-0

Syllabus:

Language whose command is required to complete the course:

English

Notes:

Assessment of courses

Total number of evaluated students: 18

A	В	С	D	Е	FX
22.22	22.22	27.78	27.78	0.0	0.0

Lecturer: PaedDr. Alexandra Mandáková, PhD., PaedDr. Žaneta Pavlíková, PhD., PaedDr. Eva Stradiotová, PhD.

Date of the latest change: 11.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAJ | **Title of course:** CJ 2 - Business English for Intermediate Students II (10)

FAJ/IJA215400/21

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 3

Recommended semester/trimester of study: 4.

Degree of study: I., N

Prerequisites:

Requirements to complete the course:

Activity at seminars – 20 %

Assessment of homework -10 %

Results of a final written test and oral exam – 70 %

Student workload:

78h (participation in seminars 26 h, preparation for seminars 26 h, preparation for the exam 26 h)

Teaching results:

Language knowledge: to know the basic principles of professional language.

Language skills: the student is able to use receptive and productive language skills at the required level, is able to create a clear comprehensible text on professional topics, he/she understands the main ideas in a clear standard speech, understands texts, is able to react in various situations which are typical for the private and professional life.

Language competencies: to use effectively acquired language skills, which are necessary for the successful student's application in practice and for social, academic or professional purposes

Indicative content:

- Stress in the workplace, negotiations, e-business
- Presenting data and numbers, numerals
- Non-committal social conversation, team building, collaboration
- Welcoming guests, innovation, young entrepreneurs
- Ecology, feedback, working abroad

Support literature:

Cotton, D., Falvey, D., Kent, S.: Market Leader Intermediate, Pearson Education Limited, Harlow, 2010, ISBN 978-1-4082-3707-6

Cotton, D., Falvey, D., Kent, S.: Market Leader Pre-Intermediate, Pearson Education Limited, Harlow, 2012, ISBN 978-1-408-23695-6

O'Keeffe, M., Lansford, L., Wright, R., Powell, M., Wright, L. Business Partner A2+. Harlow: Pearson Education Limited. 2019. ISBN 978-1-292-23353-6

Dubicka, I., O'Keffee, M., Dignen, B. Hogan, M., Wright, L. Business Partner B1+. Harlow: Pearson Education Limited. 2018. ISBN 978-1-292-23355-0

Syllabus:

Language whose command is required to complete the course:

English

Notes:

Assessment of courses

Total number of evaluated students: 9

A	В	С	D	Е	FX
0.0	55.56	11.11	11.11	22.22	0.0

Lecturer: PaedDr. Alexandra Mandáková, PhD., PaedDr. Žaneta Pavlíková, PhD., PaedDr. Eva Stradiotová, PhD.

Date of the latest change: 11.12.2021

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KPF | Title of course: Corporate Finance

FPM/IME21025/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 5

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

6 % continuous student activity during the semester, 24 % written test, 70 % final written exam (4 open theoretical questions, each focusing on a different area of financial management and 2 examples)

Student's workload (in hours):

student workload: 130 h (attendance at lectures 26 h, attendance at seminars 26 h, preparation for seminars including homework 20 h, preparation for credit paper 14 h, preparation for exam 44 h)

Student workload:

Teaching results:

Knowledge:

• Students will acquire a set of knowledge and methods that will enable them to independently orient themselves in the issue of financial management of enterprises. After completing the subject Corporate Finance, students will be able to understand the basic areas of financial management of the enterprise, on the basis of the acquired knowledge they will be able to analyze the sources of financing of the enterprise and in the case of additional need for additional resources and to propose options for obtaining these resources so that it would be effective for the enterprise in terms of the cost of obtaining sources of financing and efforts to minimize them. In addition to the traditional standard forms of financing, students will also be able to propose financing through so-called alternative sources of financing. In the case of new investments of an enterprise, the student will be able to analyse the suitability and profitability of the projects for the enterprise by means of several methods of evaluation of investment projects on the basis of the acquired knowledge. In the course, the student will also acquire basic knowledge in the field of financial analysis of the enterprise and financial planning, which is necessary for successful completion of subsequent courses in subsequent years of study.

Competence:

- to be familiar with the basic issues of corporate financial management,
- to propose options for financing business activities,
- analyse, assess and make effective decisions within the framework of individual financing options in terms of several factors (cost of capital, availability of financial resources, administrative complexity in obtaining them, etc.),
- propose the use of alternative sources of financing,

• assess the effectiveness of investment project options and select the optimal option in the light of the chosen decision criterion.

Skill:

- analyze and quantify the cost of capital of the enterprise,
- quantify the need for financial resources, then analyse the profitability of different options for sources of enterprise financing,
- analyse the solvency of the enterprise,
- analyse and evaluate the economic efficiency of investment projects through dynamic methods of evaluating the efficiency of investment projects,
- assess the possibilities of using alternative forms of financing (venture capital, subsidies, euro funds).

Indicative content:

Thematic definition of lectures:

- 1. Development, characteristics and content of corporate finance.
- 2. Financing of the enterprise, its property, financial and capital structure.
- 3. Acquisition of equity capital from external sources.
- 4. Raising equity capital from internal sources.
- 5. Acquisition of long-term and medium-term capital by means of credit.
- 6. Obtaining financial resources from short-term loans.
- 7. Financial support of enterprises from public sources.
- 8. Placement (allocation) of capital in fixed tangible and intangible assets.
- 9. Financial investment of an enterprise.
- 10. Financing of current assets of the enterprise, their characteristics and structure.
- 11. Factors influencing the exchange rate in the long and short term.
- 12. Determination of enterprise value.
- 13. Financial analysis and planning of the enterprise.

Thematic definition of exercises:

- 1. Cash flow
- 2. Time value of money
- 3. Financial and capital structure of the enterprise
- 4. Raising equity capital from external sources
- 5. Raising equity capital from internal sources
- 6. Acquisition of equity from internal sources
- 7. Obtaining financial resources through loans
- 8. Financing businesses through the use of finance leases
- 9. Comparison of financing through leasing and credit
- 10. Placement of capital in fixed assets
- 11. Evaluating the efficiency of investment projects
- 12. Evaluation of the riskiness of investment projects
- 13. Financial investments of the enterprise

Support literature:

Basic literature:

1. BREALEY, Richard - MYERS, Stewart C. - MARCUS, Alan J. Fundamentals of Corporate Finance. Kindle Edition, 2012. 784 s. ISBN 978-0078034640.

Supplementary literature:

- 1. BERK, Jonathan DEMARZO, Peter. Corporate Finance. Harlow: Pearson, 2020. 1181 s. ISBN 978-1292-30415-1.
- 2. VINCZEOVÁ, Miroslava KRIŠTOFÍK, Peter. Corporate finance. Banská Bystrica : Matej Bel University, 2013. 133 s. ISBN 978-80-557-0490-6.

3. CORRELI, Angelo. Analytical Corporate Finance. New York: Springer International Publishing AG, 2018. 501 s. ISBN 3319957619.

Syllabus:

Thematic definition of lectures:

- 1. Development, characteristics and content of corporate finance. Content, principles and procedures of corporate financial management. Basic categories used in financial management. Financial policy of the enterprise and financial objectives of the business activity. Financial decision-making of the enterprise.
- 2. Financing of the enterprise, its property, financial and capital structure. Necessary amount of capital of the enterprise. Capital structure. Structure of financial resources of the enterprise. Optimal financial structure of the enterprise.
- 3. Acquisition of equity capital from external sources. Deposits of owners. Venture (risk) capital entry. Raising equity capital in venture capital companies. Shares and their types, ordinary, preference and employee shares. Technique of share issue.
- 4. Raising equity capital from internal sources. Financing corporate needs from profits. Method of quantifying profit. Distribution of profits: taxes, dividends, formation of reserve funds. Self-financing of the enterprise. Pension funds. Financing of corporate needs from depreciation. Depreciation as a source of financing. Depreciation policy of the state and enterprises. Other internal sources of financing.
- 5. Acquisition of long-term and medium-term capital by means of credit. Issuance of corporate bonds, their types, coverage, yield and repayment. Financial credits: term loans, mortgage loans, revolving loans, export credits. Supplier loans. Special forms of credit: leasing, forfaiting, franchising.
- 6. Obtaining financial resources from short-term loans. Trade credit. Promissory note as an instrument of trade credit. Fixed and non-fixed liabilities, advances, issue of commercial paper, short-term bank loans. Factoring as a form of short-term financing.
- 7. Financial support of enterprises from public sources. Reasons and factors for targeting financial support. Direct and indirect forms of support. Financial support of enterprises in the Slovak Republic, entities and programmes. Forms and objectives of the European Union subsidy policy.
- 8. Placement (allocation) of capital in fixed tangible and intangible assets. Characteristics of financial aspects of investment. Methods of selecting a suitable variant of an investment project. The impact of inflation on investment decision-making. Selection of an investment project in the capital budget. Financing of major investment projects.
- 9. Financial investment of an enterprise. Investing capital in financial assets. The role and instruments of the financial market. Criteria for financial investment. Portfolio of securities. Strategic objectives of corporate financial investment.
- 10. Financing of current assets of the enterprise, their characteristics and structure. Management of inventories, receivables and prompt cash. Cash cycle.
- 11. Factors influencing the exchange rate in the long and short term. Management of the enterprise's currency risks.
- 12. Determination of enterprise value. Motives for determining the value of an enterprise. Basic information inputs and factors. Methods of enterprise value determination. Valuation of business assets in special conditions.
- 13. Financial analysis and planning of the enterprise. The importance and roles of financial analysis in the management of corporate finance. Retrospective financial analysis. New criteria for assessing business performance economic value added (EVA) and market value added (MVA). Predictive financial analysis. Definition of the nature and tasks of a financial plan. Structure, content and process of financial plan development. Characteristics of the different parts

of the financial plan. Methods and models for the development of a company's financial plan. Control of implementation, adjustments and changes to the plan...

Thematic definition of exercises:

- 1. Cash flow cash flow of the enterprise. Calculation of cash flow by direct and indirect methods. Analysis of financial ratios specifically liquidity ratios.
- 2. Time value of money future value of money (interest earner, saver, funder), present value of money (de-interest earner, funder, redeemer). The impact of inflation and taxation of interest income on the time value of money.
- 3. Financial and capital structure of the enterprise costs related to the commitment of the individual components of capital, cost of equity capital, cost of foreign capital, calculation of the average nominal and real cost of capital.
- 4. Raising equity capital from external sources shares and their value (nominal, book, market, etc.), share issue and subscription right calculation of subscription right in case of additional share issue, subscription right price, new average market price of shares after issue.
- 5. Raising equity capital from internal sources financing the company from profits. Factors influencing the formation of the economic result. Taxation of the economic result adjustment of the economic result to the tax base by means of the so-called addable and deductible items, calculation of the economic result after taxation, distribution of profit.
- 6. Acquisition of equity from internal sources types of depreciation (tax, accounting), difference between them. Calculation of depreciation through accounting depreciation methods (straight-line, progressive, declining, uneven).
- 7. Obtaining financial resources through loans. Establishment of the most commonly used loan repayment plans (repayment plan with the same amount of repayment, with the same amount of total payment, with a regularly increasing repayment, etc.).
- 8. Financing businesses through the use of finance leases calculation of the lease price, down payment, lease payment. Application of leasing in financing the acquisition of fixed assets of the enterprise.
- 9. Comparison of financing through leasing and credit. Conversion of costs related to leasing and credit to present value, selection of an efficient form of financing (in terms of the criterion of cost minimization).
- 10. Placement of capital in fixed assets types of investment projects, calculation of basic economic parameters of investment projects (capital expenditures, expected cash receipts, useful life).
- 11. Evaluating the efficiency of investment projects through methods of evaluating the efficiency of investment projects, with the main focus on dynamic methods (net present value, internal rate of return, as a complementary method payback period with time update).
- 12. Evaluation of the riskiness of investment projects use of basic statistical methods in the analysis of the riskiness of investment projects (standard deviation, coefficient of variation). Comparison of the riskiness of several investment projects.
- 13. Financial investments of the enterprise basic methodology of calculating the market price of securities (bonds, preferred and common shares). Calculation of expected return and riskiness of securities.

Language whose command is required to complete the course: Slovak

Notes:

Assessment of courses

Total number of evaluated students: 708

A	В	С	D	Е	FX
30.65	16.95	17.94	18.79	15.25	0.42

Lecturer:

Date of the latest change: 02.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Database Systems I

FHI/IIA21130/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 3.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

60 % final exam: the exam consists of two parts: a test and an open task to design the database structure for the given environment. The test verifies the achieved level of learning outcomes A., B., C., D., by solving the task, the achieved level of learning outcomes E. and F are verified. 40 % assignments: The content of the exercise is the elaboration and defense of an individual project of database design and implementation in the selected DBMS with SQL interface through several assignments, which are evaluated separately. The overall evaluation is the sum of the points obtained for individual tasks. Through these assignments, the fulfilment of the learning outcomes E., F., G., H. is assessed.

Student workload:

Total study load (in hours): $6 \text{ credits } \times 26 \text{ hours} = 156 \text{ hours}$

Distribution of study load

Lectures and seminar participation: 52 hours

Preparation for seminars: 13 hours Written assignments: 51 hours Final exam preparation: 40 hours

Teaching results:

After completing the course, students should be able to:

- A. know the principles and role of database systems
- B. understand the process of effective data organization, protection and management
- C. understand relational algebra and how queries are performed in relational databases;
- D. understand the principles and techniques of concurrent work in database systems
- E. analyze business requirements and, based on the results of the analysis, design and implement a standardized, relational data model;
- F. work with SQL language in defining, manipulating and updating data, as well as controlling access to database objects.
- G. Work with selected DBMSs:
- H. Administer selected DBS at a moderate level.

Indicative content:

Course content:

1. Introduction to the subject, history of information storage

- 2. Reality modelling, ANSI / SPARC architecture, conceptual models.
- 3. Entity-relationship model.
- 4. Data models, relational data model.
- 5. Transformation of conceptual models into logical data models.
- 6. Normalization and normal forms of relations.
- 7. Methodology of relational databases design.
- 8. Physical data models and their implementation in DBS.
- 9. Relational languages.
- 10. Data protection in database systems and principles of transaction processing.
- 11. Concurrency in DBS.
- 12. Object Oriented DBS.
- 13. DBS architectures

Support literature:

ŠKURLA, P: Databázové spracovanie. In: PÓLYA, A. a kolektív: Informatika. Bratislava: Vydavateľstvo EKONÓM, 2008, s. 201 - 252. ISBN 978-80-225-2453-7

DATE, C.J: An Introduction to Database Systems (8th Edition), Addison-Wesley, 2003, s. 1024, ISBN: 978-0321197849

Scheber, A. Databázové systémy. Alfa-SNTL, 1988.

Veryard, R. Information Modelling - Practical Guidance. London: Prentice-Hall, 1992.

Veryard, R. Information coordination - The management of Information Models, Systems and Organizations. London: Prentice-Hall, 1994.

TEOREY, J. - Lightstone, S.- Nadeau, T. – Jagadish, H.V: Database Modeling and Design, Fifth Edition: Logical Design, Morgan Kaufmann, 2001, s. 352, ISBN 978-0123820204

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 677

A	В	С	D	Е	FX
5.17	18.17	31.76	25.7	9.31	9.9

Lecturer: doc. Ing. Martin Mišút, CSc., doc. Ing. Jaroslav Kultan, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Database Systems II

FHI/IIA21235/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 2 **Per course:** 0 / 26

Method of study: present

Number of credits: 3

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Requirements to complete the course:

40% continuous written work, 20% semester work, 40% exam

Student workload:

Total study load (in hours):

Student's workload (for a course that has 4 credits): 104 h (participation in lectures 26 h, participation in seminars 26 h, preparation for seminars 13 h, elaboration of a semester project 13 h, preparation for the exam 26 h)

Teaching results:

After completion of the course, students should be able to

- A. Become familiar with the Data Warehouse and with OLTP and OLAP technologies.
- B. create a program in PL/SQL and PHP.
- C. design and develop a functional application in PL/SQL /PHP/, based on a given assignment.-
- D. Generate outputs from Oracle database in the form of XML-
- E. independently debug an existing program in PL/SQL /PHP language (in terms of identifying and removing the cause of the error).
- F. Create a small information system designed to perform analysis of the economic activity of the enterprise.

Indicative content:

Advanced analysis of the economic activity of the enterprise

- 2. Data analysis multidimensional analysis
- 3. Central data warehouses and data marts. Data warehouses in the environments of selected database vendors. Ways of presenting data and information..
- 4. Data warehouse, essence, terminology. Areas and reasons for data warehouse use.
- 5. Process of data acquisition into the data warehouse. Transformation mechanism.
- 6. Data cube and data cube operations
- 7. Data warehouse creation, data structure in data warehouse, data models in data warehouse
- 8. Querying, data mining, monitoring and data warehouse administration.
- 9. OLTP and OLAP technologies. Comparison of data warehouses and relational databases. Methods of creating reports in databases and data warehouse
- 10. Programming in PL/SQL

- 11. Using PHP to create the IS application layer
- 12. Tools for creating web applications
- 13. Current BI systems

Support literature:

- 1. Schmidt, P. Bandurič, I.: 2015. Úvod do tvorby webu. Ekonóm. Bratislava 2015. ISBN 978-80-225-4209-8
- 2. KULTAN, Jaroslav SCHMIDT, Peter. Pokročilé využitie databáz pre ekonomické školy : vybrané otázky. Recenzenti: Jozef Stašák, Pavol Jurík. 1. vydanie. Bratislava : Vydavateľstvo EKONÓM, 2019. 173 s. [12 AH]. ISBN 978-80-225-4612-6.
- 3. KULTAN, J.: Databázové systémy. 1. vyd. Bratislava: Vydavateľstvo EKONÓM, 2012. 126s. ISBN 978-80-225-3350-8
- 4. LABERGE, R. et al.: Datové sklady Agilní metody a business intelligence. Bratislava: Computer Press, 2012. 352 s. ISBN 978-80-251-3729-1
- 5. ZÁVODNÝ, P., KRISTOVÁ, G., PRAŽENKA D.: Distribuované spracovanie dát. Bratislava: Vydavateľstvo EKONÓM, 2010. 267 s. ISBN 978-80-225-2901-3
- 6. PETTEY, C., MEULEN, R. Gartner Reveals Five Business Intelligence Predictions for 2009 and Beyond. [online]. [2.4.2013]. Dostupné na internete: http://www.gartner.com/newsroom/id/856714>.
- 7. LUHN, H. P. 1958. A Business Intelligence System. In IBM Journal. [online]. [31.7.2013]. Dostupné na internete: http://altaplana.com/ibmrd0204H.pdf.
- 8. ETL Extract, Transform, Load. [online]. [25.5.2013]. Dostupné na internete: http://www.webopedia.com/TERM/E/ETL.html-. HANUSEK, L., MÁŠA, P. Technologie pro data warehousing a data mining. [online]. [25.5.2013]. Dostupné na internete: http://www.technologie-prodata-warehousing-a-data-mining-2467-p2512.
- 9. INMON, W. H. Building the Data Warehouse: Getting started. [online]. [26.5.2013]. Dostupné na internete: http://inmoncif.com/inmoncifold/www/library/whiteprs/ttbuild.pdf>
- 10. OLTP vs OLAP Definition and Differences. [online]. [26.5.2013]. Dostupné na internete: http://axwonders.blogspot.sk/2011/12/oltp-vs-olap-definition-anddifferences.html.
- 11. OLAP cube [online]. [30.5.2013]. Dostupné na internete: http://en.wikipedia.org/wiki/OLAP_cube.
- 12. SEDLÁČEK, J.: Finanční analýza podniku. Brno: Computer Press, a.s., 2007. ISBN 978-80-802-251-1830-6.
- 13. KISLINGEROVÁ, Eva: Manažerské finance. 3. vyd. Praha: C.H.Beck, 2010. 811 s. ISBN 978-80-740-0194-9

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 4

A	В	С	D	Е	FX
0.0	25.0	25.0	25.0	25.0	0.0

Lecturer: doc. Ing. Martin Mišút, CSc., doc. Ing. Jaroslav Kultan, PhD.

Date of the latest change: 01.02.2022

Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Andrea Furková, PhD., Person responsible for the delivery, development and

quality of the study programme doc. Dr. Ing. Miroslav Hudec, Person responsible for the delivery, development and quality of the study programme doc. Ing. Martin Mišút, CSc., Person responsible for the delivery, development and quality of the study programme prof. Ing. Ivan Brezina, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Jaroslav Kultan, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Decision-Making Support

KOVE FHI/ IIB21500/22

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 5

Recommended semester/trimester of study: 5.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

30 % work at seminars and writing of projects

70 % combined final exam

Student workload:

5 credits \times 26 hours = 130 hours

26 hours lecture attendance

26 hours seminar attendance

26 hours preparation for lectures

26 hours preparation for seminars

13 hours writing a seminar paper

13 hours preparation for final exam

Teaching results:

Upon successful completion of the course, students will acquire the following knowledge:

- knowledge of decision-making tools suitable for the analysis of economic phenomena and processes,
- knowledge of decision-making tools for modeling economic phenomena and processes,
- knowledge of decision making tools for evaluating and setting strategies for economic processes. Upon successful completion of the course, students will acquire the following skills:
- ability to use models and methods of multiple attribute decision making methods,
- to control of adequate software to solve multiple attribute decision making problems.

Upon successful completion of the course, students will acquire the following competencies:

- practical skills and competencies associated with the application of multiple attribute decision making models and methods in the analysis of economic problems in the field of economic practice using adequate software.

Indicative content:

The course is focused on the support of decision-making processes, while the content of the course contains the areas of defining concepts and getting acquainted with the methodological apparatus of multicriteria evaluation of alternatives. The aim of the course is to build the student's ability to evaluate and solve typical conflict decision-making situations, which are characterized by the

existence of several, often incomparable and conflicting intentions. Emphasis is also placed on the software applications of selected methods.

Support literature:

- 1. Hwang, Ching-Lai, Yoon, Kwangsun. Multiple Attribute Decision Making Methods and Applications. A State-of-the-Art Survey. Springer-Verlag Berlin Heidelberg, 2011.
- 2. PEKÁR, Juraj FURKOVÁ, Andrea. Prípadové štúdie z viackriteriálneho rozhodovania. Bratislava : Vydavateľstvo EKONÓM, 2014.
- 3. Zavadskas, Edmundas Antucheviciene, Jurgita Chatterjee, Prasenjit. Multiple-Criteria Decision-Making (MCDM) Techniques for Business Processes Information Management. Mdpi AG, 2019.

Syllabus:

- 1. Basic concepts of multicriteria decision making process. Alternatives and criteria. The principle of optimality, the principle of acceptability and the principle of efficiency. Taxonomy of problems and methods of multicriteria decision making process. The role of multicriteria optimization. The role of multicriteria evaluation of alternatives.
- 2. The basis of models and methods of multicriteria evaluation of alternatives.
- 3. Modeling of preferences between criteria based on aspiration levels Conjunctive method, Disjunctive method.
- 4. Modeling of preferences between criteria based on ordinal information Lexicographic method, Permutation method.
- 5. Modeling of preferences between criteria based on ordinal information ORESTE method.
- 6. Modeling of preferences between criteria weighting methods for multi-criteria decision making Ranking method, Fuller's method.
- 7. Modeling of preferences between criteria weighting methods for multi-criteria decision making Point Allocation Method, Saaty's method.
- 8. Modeling of preferences between alternatives the principle of utility maximizing Weighted sum method, the principle of minimizing the distance from the ideal alternative TOPSIS method
- 9. Modeling preferences between alternatives methods of pairwise comparison.
- 10. Modeling of preferences between alternatives methods of pairwise comparison PROMETHEE methods (PROMETHEE I, II).
- 11. Modeling preferences between alternatives methods of pairwise comparison PROMETHEE class methods (PROMETHEE III, IV, V).
- 12. Modeling of preferences between alternatives methods of pairwise comparison ELECTRE methods.
- 13. Case studies and applications in the field of multicriteria evaluation of alternatives.

Language whose command is required to complete the course:

Slovak, English

Notes:

Assessment of courses

Total number of evaluated students: 528

A	В	С	D	Е	FX
27.08	24.43	16.48	7.77	23.86	0.38

Lecturer:

Date of the latest change: 30.03.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | Title of course: E- Business

FHI/IIA21300/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 2 **Per course:** 0 / 26

Method of study: present

Number of credits: 3

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

50 points elaboration and defense of the project - students develop a project during the semester on a selected topic assigned by the teacher at the beginning of the semester. Topics relate to the areas of e-business. This is how we verify the following learning outcomes: E., F., G.

Final rating 50%

50 points for the written exam - the exam consists of questions verifying the acquired knowledge from the following learning outcomes: B., C., D., F.

Student workload:

Total study load (in hours): 78 hours

Distribution of study load Seminar participation: 13 hours, Preparation for seminars: 13 hours, Final paper preparation: 26 hours,

Preparation of presentation and presentation itself: 26 hours

Teaching results:

After completing the course, students should be able to:

- A. Orient and have an overview of e-business issues
- B. Analyze user needs and formulate the essence of the task
- C. Know the possibilities of using ICT in the field of customer relationship management, in the field of supplier-customer relations
- D. Knowledge of the current conditions of application of the concept of e-business.
- E. The essence of the successful implementation of a complete e-business solution
- F. Realize that in order to implement the concept of e-business in practice, it is necessary to address the following areas: · deployment of business and information portals
- G. Present and defend at a professional level their proposed solutions
- H. Create and program a Website Project Design

Indicative content:

1. The position of electronic business in the company and society. The influence of the EB on the organization

- 2. E-commerce strategies. Means to achieve strategic goals. Alliance building, global reach, rapid partial innovations, emphasis on individual customer needs, flexible management, teamwork, virtual teams, knowledge-based IS and application integration
- 3. Basic relationships between entities in e-business, e-business applications and their relationships
- 4. Search Engine Optimization. SEO in the case of a finished website. SEO in the case of a new website. Competition analysis.
- 5. Advertising, marketing and public relations on the Internet.
- 6. Online marketing campaign.
- 7. Electronic procurement, e-Procurement. Principles, possibilities and functions of electronic supply. Options, services and categories of electronic marketplaces.
- 8. Complex of applications and technologies for supply chain management Supply Chain Management (SCM). Processes in SC. Principles of SCM solution.
- 9. Customer Relationship Management (CRM) customer relationship management as part of e-business. CRM processes. Processes and business cycle.
- 10. Mobile trading, principles of m-Commerce solution, possibilities and functionality of m-Commerce.
- 11. Security issues in the field of electronic business.
- 12. Use of DTP applications in business practice, creation and use of press documents for company presentation.
- 13. Website project design using the Wordpress content management system.

Support literature:

DOMES, M.: SEO jednoduše, Computer Press, a.s. Brno 2011, ISBN 978-80-251-3456-63.

DORČÁK, P, - POLLÁK, F.: Marketing & e-business, EZO, s. r. o. Prešov 2010, ISBN 978-80-970564-0-74.

BELEŠČÁK, D.: Vytváříme e-shop ve WordPressu pomocí WooCommerce. Brno: Computer Press, 2014. 238 s. ISBN 978-80-251-4153-3.

BLAŽKOVÁ, M.: Ako využiť internet v marketingu, Praha, Grada Publishing 2005, ISBN 80-247-1095-15.

BEDNÁR, M. 2010. Programujeme internetový obchod. Košice. Vydavateľstvo Milan Bednár 2010.

208 s. ISBN 9788097048464

PEACOCK, M. 2011. Programujeme vlastní e-shop. Brno. Computer Press 2011. 336 s. ISBN 9788025131817

SEDLÁČEK, J. E-komerce, internetový a mobil marketing od A po Z. Praha: BEN – technická literatúra, 2006. 351 s. ISBN 80-7300-195-

DOMES, M. 2008. Tvorba WWW stránek pro úplné začátečníky . Brno. Computer Press 2008. 246 s. ISBN 9788025121603

Redakčný systém Wordpress: http://sk.wordpress.org/

Syllabus:

Language whose command is required to complete the course:

slovak

Notes:

Assessment of courses

Total number of evaluated students: 64

A	В	С	D	Е	FX
93.75	4.69	1.56	0.0	0.0	0.0

Lecturer: Ing. Mária Szivósová, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Economic Analysis I

KOVE FHI/ IIB21123/22

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 5.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

40 % assignments; 60 % final exam

Student workload:

156 hours

Lectures participation: 26 hours, Seminar participation: 26 hours, Semester work: 42 hours

Preparation for final exam: 62 hours

Teaching results:

The graduate of the course will gain an introduction to the ability to explain the basic economic phenomena by formulating solving and interpreting economic models, especially at the essential (micro) economic level.

Abilities:

- Ability to solve simple economic problems using economic models at the essential (micro) economic level.

Skills:

- Introduction to economic theory; understanding the basic principles of business and consumer behavior, the phenomenon of risk and its impact on economic behavior, understanding the principles of general equilibrium relations in a simple economy (the economy of Robinson Crusoe or the economy of a banana island).

Competencies:

- Ability to evaluate the effects of basic economic policies and shocks, the basic ability to formulate and express the theoretical economic foundations for statistical economic (econometric) analysis, especially at the essential (micro) economic level.

Indicative content:

- 1. Basic economic terms and measurements
- 2. The firm's production analysis
- 3. Firm behaviour
- 4. The firm's cost analysis
- 5. Behaviour of monopoles and oligopolies
- 6. Consumer behaviour
- 7. Comparative statics in the consumption theory

- 8. Banana island economy
- 9. Financial impacts on banana Island economy
- 10. Risk and its impact on economic behaviour of firms and consumers
- 11. General equilibrium on markets
- 12. Efficiency and welfare in national economy
- 13. Model of Robinson Crusoe economy

Support literature:

- 1. Doepke, M., Lehnert, A., Sellgren, A.W. Macroeconomics. http://faculty.wcas.northwestern.edu/~mdo738/book.htm (október 2019).
- 2. Wang, Susheng (2018). Microeconomic Theory. Singapore: Springer.
- 3. Williamson, S. D. (2018). Macroeconomics. Harlow: Pearson.

Syllabus:

Language whose command is required to complete the course:

Slovak, English

Notes:

Assessment of courses

Total number of evaluated students: 6

A	В	С	D	Е	FX
50.0	16.67	33.33	0.0	0.0	0.0

Lecturer: doc. Ing. Karol Szomolányi, PhD.

Date of the latest change: 06.05.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Economic Analysis II

KOVE FHI/ IIB21124/22

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 5

Recommended semester/trimester of study: 6.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

40 % assignments;

60 % final exam

Student workload:

130 hours

Lectures participation: 26 hours Seminar participation: 26 hours Semester work: 30 hours

Preparation for final exam: 48 hours

Teaching results:

The graduate of the course will gain an introduction to the ability to explain the basic economic phenomena by formulating solving and interpreting economic models.

Abilities:

- Ability to solve simple economic problems using economic models.

Skille.

- Introduction to economic theory; understanding the basic principles of economic growth, business cycles, inflation, money non-neutrality, monetary theory.

Competencies:

- Ability to evaluate the effects of basic economic policies and shocks, the basic ability to formulate and express the theoretical economic foundations for statistical economic (econometric) analysis, especially.

Indicative content:

- 1. Economic performance observations over many periods economic growth, business cycles and inflation phenomena.
- 2. Economic growth.
- 3. Growth model, differences between rich and poor countries.
- 4. Unemployment, unemployment model.
- 5. Business cycle models, closed economy.
- 6. Model of small open economy.
- 7. Money and business cycles.

- 8. Money in small open economy model.
- 9. Business cycle theories with flexible prices and wages.
- 10. New Keynesian theory of business cycles.
- 11. Inflation, Phillips Curve and Neo-Fischer effects.
- 12. Money, inflation and banks.
- 13. Monetary economy.

Support literature:

- 1. Barro, R.J. Macroeconomics A Modern Approach. Thomson South Western, 2008.
- 2. Doepke, M., Lehnert, A., Sellgren, A.W. Macroeconomics. http://faculty.wcas.northwestern.edu/~mdo738/book.htm (október 2019).
- 3. Schmitt-Grohe, S., Uribe, M., Woodford, M. International Macroeconomics. http://www.columbia.edu/~mu2166/UIM/ (október 2019).
- 4. Wang, Susheng (2018). Microeconomic Theory. Singapore: Springer.
- 5. Williamson, S.D. Macroeconomics. Harlow: Pearson, 2018.

Syllabus:

Language whose command is required to complete the course:

Slovak, English

Notes:

Assessment of courses

Total number of evaluated students: 0

A	В	С	D	Е	FX
0.0	0.0	0.0	0.0	0.0	0.0

Lecturer: doc. Ing. Karol Szomolányi, PhD.

Date of the latest change: 21.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Economic Informatics

FHI/IIA21985/22

Type, load and method of teaching activities:

Form of course:

Recommended load of course (number of lessons):

Per week: Per course: Method of study: present

Number of credits: 10

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Student workload:

Teaching results:

Indicative content:

Support literature:

Syllabus:

Language whose command is required to complete the course:

Notes:

Assessment of courses

Total number of evaluated students: 92

A	В	С	D	Е	FX
36.96	23.91	14.13	14.13	10.87	0.0

Lecturer:

Date of the latest change: 31.03.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | **Title of course:** Economic Informatics I

FHI/IIA21160/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 7

Recommended semester/trimester of study: 5.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Requirements to complete the course:

Seminars: 40% seminar project (extensive paper prepared in groups on current professional topics related to economic informatics). The seminar project verifies the achieved level of educational results C., E., F.

Final exam: 60% knowledge test done on-line using a testing application, which verifies the achieved level of educational results A., B., C., D.

Student workload:

Total study load (in hours):

182 hours (of which participation in lectures: 26 hours, participation in seminars: 26 hours, preparation for the exam: 65 hours, elaboration of a semester project: 65 hours).

Teaching results:

After completing the course, students should be able to:

- A. Distinguish types of enterprise IS (information systems), their functionality and trends in IS development, which are based on appropriate methods and architecture.
- B. Distinguish different types of organizational structures, differences between functional and process management of the company.
- C. Use various diagram and tabular techniques that serve to illustrate the architecture of the company. Special attention is paid to techniques for illustrating the course of business processes.
- D. Distinguish different types of applications used in enterprise information systems.
- E. Master the principles of writing seminar papers and other serious professional papers so that these works are compiled from credible sources, have a systematic structure and relevant content. The seminar paper is prepared in groups, thanks to which students develop team cooperation and at the same time learn the basic principles of writing final theses.
- F. Use Drawio software, which is available for free on-line. This software is used to create diagrams and to practice individual diagram techniques

Indicative content:

- 1. Enterprise definition. Classification of enterprises. Different types of organizational structure of a company. Principles of creating organizational diagrams.
- 2. Functional business management. Hierarchical diagram of functions. Relational matrix. Diagram of functional dependencies its global level and sub-levels.

- 3. Business process management. Business processes and their basic characteristics. Process map. Process classification main, management and support processes, internal and external processes.
- 4. Diagram and spreadsheet techniques for business process modeling: flowcharts, BPMN diagrams, RACI matrices, decision tables.
- 5. Enterprise architecture. The model of the essential environment of the company and the interconnection of individual diagrams, which together create a comprehensive and coherent model of corporate architecture.
- 6. Information system and its basic characteristics. Data and information. Information properties. Information system functions. Classification of information system subsystems with a focus on the manufacturing company.
- 7. Global information system architecture strategic, tactical and operational level of management. Executive Information System. Management Information System. Decision support systems. Expert systems. Electronic Data Interchange, Office Information System.
- 8. Partial architectures of the information system application, software, data / information and technology architecture. Cloud Computing and its types.
- 9. History of information systems in Slovakia.
- 10. Information systems life cycle traditional and agile approaches. Waterfall, incremental and evolutionary model. SCRUM, Extreme Programming and Adaptive Software Development.
- 11. Different types of business applications and possibilities of their use. ERP, ERP II, CRM, SCM.
- 12. Different types of business applications and possibilities of their use APS, MES, concept CIM, BI
- 13. System integration. Ways of integration with a small number of applications. Complex solutions for complex systems. Virtual enterprise and its characteristics.

Support literature:

JURÍK, Pavol. Informačné systémy v podnikovej praxi. Odborní recenzenti: Peter Schmidt, Ján Pittner. 2. [aktualizované] vydanie. Nové Zámky : Tlačiareň Merkur, 2018. 185 s. [9,85 AH]. ISBN 978-80-970233-7-9.

Basl, J. – Blažíček, R. Podnikové informační systémy, Podnik v informační společnosti – 3., aktualizované a doplněné vydání, Grada, 2012, ISBN 9788024743073

POUR, J. – GÁLA, L. – ŠEDIVÁ, Z.: Podniková informatika. 3. vydanie. Praha: Grada Publishing, a. s., 2015. 240 s. ISBN 978-80-247-5457-4.

BRUCKNER, T. – VOŘÍŠEK, J. – BUCHALCEVOVÁ, A. – STANOVSKÁ, I. – CHLAPEK, D. – ŘEPA, V.: Tvorba informačních systemů. Praha: Grada Publishing, a. s., 2012. 360 s. ISBN 978-80-247-4153-6.

Syllabus:

Language whose command is required to complete the course: slovak

SIOVan

Notes:

Assessment of courses

Total number of evaluated students: 773

A	В	С	D	Е	FX
9.57	18.89	21.86	20.31	19.28	10.09

Lecturer: Ing. Pavol Jurík, PhD., doc. Ing. Martin Mišút, CSc.

Date of the latest change: 01.02.2022

Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Andrea Furková, PhD., Person responsible for the delivery, development and

quality of the study programme doc. Dr. Ing. Miroslav Hudec, Person responsible for the delivery, development and quality of the study programme doc. Ing. Martin Mišút, CSc., Person responsible for the delivery, development and quality of the study programme prof. Ing. Ivan Brezina, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Jaroslav Kultan, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | Title of course: Economic Informatics II

FHI/IIA21265/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 4

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Seminars: 40% seminar project (team practical project - design of services forming an information system built on the principles of service-oriented architecture based on the analysis of business processes in a fictitious company). The seminar project verifies the achieved level of educational results A., B., H.

Final exam: 60% knowledge test done on-line using a test application, which verifies the achieved level of educational outcomes C., D., E., F., G.

Student workload:

104 hours (of which participation in lectures: 26 hours, participation in seminars: 26 hours, preparation for the exam: 26 hours, elaboration of a semester project: 26 hours).

Teaching results:

After completing the course, students should be able to:

- A. Model business processes in a particular company using appropriate diagram and tabular techniques in conjunction with the organizational structure and functions of organizational units.
- B. Based on the above model, design web services to automate business processes in the selected company.
- C. Write and read data in XML format.
- D. Create XSD templates prescribing the desired format of XML documents.
- E. Write data to XML documents to meet the requirements of the templates.
- F. Understand the basics of WSDL, SOAP, and UDDI registers.
- G. Use online validators to work with XML and XSD languages.
- H. Use Drawio software to create business analysis diagrams that is available on-line for free. For some table techniques MS Excel is used (relational tables, decision tables, RACI matrices).

Indicative content:

- 1. The essence of service-oriented architecture and its basic principles. Advantages and disadvantages of its use.
- 2. Basic terminology. Service description. Abstraction. Reusability of services. Composition of services choreography and orchestration. Service autonomy and statelessness. Open standards. Technology platform.

- 3. Basic characteristics of web services and the mechanism of message transmission between them. Active and passive intermediaries. Possible ways of implementing the user interface for web services. WSGUI Engine.
- 4. Classification of web services according to the way they are used in the concept of SOA entity, processing, auxiliary and coordination services and their relationship to business processes.
- 5. Example of using service models to automate a specific business process.
- 6. Life cycle of a service-oriented information system. Service-oriented analysis.
- 7. XML language. The meaning of its use and the possibility of its use in SOA. Rules for validation of XML documents creation of well-formed XML documents.
- 8. XSD language. The meaning of its use and the possibility of its use in SOA. Basic data types.
- 9. XSD language. Simple user-declared data types.
- 10. XSD language. Compound user-declared data types. Creating properly structured XSD documents.
- 11. WSDL language. The meaning of its use and the possibility of its use in SOA. WSDL document structure. Abstract versus specific service description. Messages, operations, interfaces, bindings, and ports.
- 12. UDDI register. The meaning of their use and the possibility of their use in SOA. Public versus private registers. Structure of public registers.
- 13. SOAP protocol and its use in SOA. SOAP message structure. Rules for creating SOAP message headers and bodies. Error messages. SOAP message styles RPC / encoded, RPC / literal, document / encoded, document / literal.

Support literature:

- 1. JURÍK, Pavol. Servisne orientovaná architektúra v procesne riadenom podniku. Odborní recenzenti: Peter Závodný, Magdaléna Cárachová, Jozef Stašák. 1. vydanie. Vedecká monografia. Nové Zámky: Tlačiareň Merkur, 2020. 178 s. [9,001 AH]. ISBN 978-80-89996-06-3.
- 2. ERL, T. SOA Servisně orientovaná architektura, Computer Press, 2009, ISBN 9788025118863
- 3. HEROUT, P.: Java a XML. 2012. České Budějovice: Kopp. 313 s. ISBN 978-80-7232-307-4.
- 4. STAŠÁK, J.: Modelovanie systému riadenia ekonomických objektov. 2010. Bratislava: Vydavateľstvo Ekonóm. 182 s. ISBN 978-80-225-2896-2.

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 2

A	В	C	D	Е	FX
0.0	0.0	0.0	100.0	0.0	0.0

Lecturer: doc. Ing. Martin Mišút, CSc., Ing. Pavol Jurík, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Informatics I

FHI/IIA21120/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 7

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Prerequisites: 40% term paper, demonstrating competency in educational outcomes E, F, G. 60% written exam, demonstrating competency in educational outcomes A,B,C,D.

Student workload:

Total study load (in hours):

182 h (participation in lectures 26 h, participation in seminars 26 h, preparation for seminars 26 h, elaboration of a semester project 52 h, preparation for the exam 52 h)

Teaching results:

After completing the course, students should be able to:

- A. Orientate themselves in the application of current information and communication technologies in practice with emphasis on the use of PCs.
- B. Understand in detail the hardware components of a computer (motherboard, processor, RAM, graphics cards, UPS, I / O devices, and others).
- C. Assess the age and applicability of technologies.
- D. Assess the applicability of technologies in specific areas.
- E. Understand the basics of the Internet of Things and the possibilities of its application.
- F. Distinguish basic network components and their role in a computer network.
- G. Appropriately design the composition of the computer's hardware components.

Indicative content:

Indicative content:

- 1. Basic concepts and terminology of computer science (data, information management, bit, byte, multiples, new denotation of multiples, location of computer science among disciplines).
- 2. The computer and its logical and physical structure (Harvard and Von-Neumann architecture, computer operation, memory, registers, memory management).
- 3. Processors, CPU architecture (division, CPU by manufacturers and use, CPU by instruction set, slot used) .
- 4. Motherboards, Graphics Cards (Divisions of MB by size, by processor, generation of CHIP sets, graphics card usage, GPU, GPU performance, CPU and GPU parameters, integrated CPU with GPU.
- 5. Memory and storage media (Types of ROM, RAM, Evolution of ROM, RAM, Generation of RAM, FDD, HDD, SSD, flash drive, memory cards, optical media).

- 6. I/O devices (historical overview, mechanical, magnetic input units, terminals, printers, South bridge and I/O device management.
- 7. Power supplies, UPS (power supply divisions, connectors, voltages on connectors, wiring of MB and all devices, UPS types and wiring).
- 8. Displays monitors (display technologies CRT, TFT, Plasma, LCD, LED, OLED, device parameters, proper setup, resolution, brightness, contrast, refresh rate, etc.).
- 9. Printers, plotters (division of printers historically, nature, different technologies, mechanical, optical, inkjet, thermal printers, division and use of plotters).
- 10. Interfaces. Communication interfaces. Keyboards, mice, tablets, headsets, microphone, VR glasses, R devices.
- 11. Networking components (nature of computer networks, PAN and LAN, media, metallic, optical, terminations, active and passive elements).
- 12. IoT basics (essence of technologies that belong to IoT, microcomputers, controllers, development platforms.
- 13. Sensors and communication units, interconnect arrays, device design using appropriate software design tool.

Exercises:

In the exercises students will master the spreadsheet and its use in solving economic problems.

- 1. Numerical operations: analysing, recording costs, creating various analyses, various financial analyses, etc.
- 2. Creating graphs creating a wide variety of highly correctable graphs
- 3. Creating lists creating and storing records efficiently in simple spreadsheets
- 4. Text operations standardizing and editing text data
- 5. Search functions application to an area, sheet, multiple sheets
- 6. Statistical functions Chi-square, correlation, Poisson distribution etc. in statistical data processing
- 7. Accessing other data Extraction of different data sources
- 8. Creating graphical dashboards Simplification for macro analysis of large amounts of data
- 9. Creating charts and diagrams Various graphical shapes or professional diagrams can be created through SmartArt
- 10. 13. Automation of complex tasks automation of tedious and routine processes

Support literature:

Schmidt, P. – Kultan, J. – Procházka, P.: Informatika 1

Schmidt,P.: IKT pre začinajúcich používateľov, Bratislava 2013, ISBN 978-80-971532-0-5 Jindřich Kaluža, Ludmila Kalužová. Informatika. Ekopress 2012, ISBN: 9788086929835

Syllabus:

Language whose command is required to complete the course:

Notes:

Assessment of courses

Total number of evaluated students: 880

A	В	C	D	Е	FX
18.52	22.95	25.91	16.59	11.36	4.66

Lecturer: doc. Dr. Ing. Miroslav Hudec, Ing. Mgr. Peter Schmidt, PhD., Ing. Peter Procházka, PhD., Ing. Mária Szivósová, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | Title of course: Informatics II

FHI/IIA21125/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Exam 60% marks. The exam consists of two parts: a test and a specific problem-solving task. The test verifies the achievement of learning outcomes A., C., F., G., the problem-solving task verifies the achievement of learning outcomes B., C., D., E.

Exercises 40% Exercises involve developing and defending a project on which students work individually. The content of the overall project is a summary of several assignments in the field of computer science, basic and application software. These assignments will be worked on individually or in the form of joint documents. The assessment of the individual student will also include the student's activity in practicing and opposing and evaluating the projects of other students. The results of the work are submitted in the form of sub-projects from which the final project will be developed. The final project will be submitted in the form of a text file and a video presentation of the work done

Student workload:

Total study load (in hours):

156 h (participation in lectures 26 h, participation in seminars 26 h, preparation for seminars 26 h, elaboration of a semester project 26 h, preparation for the exam 52 h)

Teaching results:

Upon completion of the course, students should be able to:

- A. Understand the basic principles of transforming numerical, textual, graphical, multimedia data about real-world objects into a system used by a computer (binary system)
- B. Analyze computer software according to the tasks it must perform.
- C. Know several and be able to select appropriate computer software depending on the type of tasks that need to be solved.
- D. Define basic and application software, additional communication software, application software to address general and specific user requirements
- E. Define the role of programming languages in the computer software system and the information system as a whole.
- F. Understand the nature of software product models, knowing the strengths and weaknesses of specific methodologies
- G. Understand how a work team works and organizes itself to work together, and learn the fundamentals of such collaboration

- H. Present and defend at a professional level the solutions proposed by them
- I. Produce a technical documentation (report) describing their proposed solution in the form of a seminar paper

Indicative content:

Indicative content:

- 1. Basic definitions: data, information, knowledge, skills. Basic types of data and their distribution. How to use different types of data and information.
- 2. Coding and encryption, basic definitions, common and different features. Numbering systems. Working in the binary system.
- 3. Method of encoding different type of data into binary system. Bit, Byte and its multiples, Word.
- 4. Computer software, basic types of programs. Basic software, general purpose software.
- 5. Operating systems, communication programs for connecting peripheral devices.
- 6. Application programs and their division. General application programs.
- 7. Software for office work. Basic operations in text and spreadsheet editors, creating presentations.
- 8. Specific application software for various areas of human activity (education, construction, engineering, mathematics and physics, etc.)
- 9. Software for computer networking.
- 10. Software aimed at communication (mail, chat, video chat, video conferencing, screen sharing, remote computer control, etc.).
- 11. Group work in project creation, document sharing, disk sharing.
- 12. Sharing computer resources. Grid technologies, cloud solutions and their use in collaborative working.
- 13. Viruses and their distribution, basics of computer law.

The basis of the exercise

- 1. Introduction to the R language.
- 2. Creating and working with objects.
- 3. Data types and the differences between them.
- 4. Operators and their use.
- 5. Basic built-in functions of the R language.
- 6. Data structures and their use.
- 7. Basics of data processing.
- 8. Working with data files.
- 9. Working with loops and conditions.
- 10. Apply family functions.
- 11. Creating custom functions.
- 12. Working with the graphical tools of the R language.
- 13. Working with external libraries (tidyverse, dplyr, etc.).

Support literature:

1. Kultan J., Serik M., Fajkus R.: Informatika pre netechnické školy, (vybrané otázky).

Bratislava: STATIS, 2012. 128 s. [8,50 AH]. ISBN 978-80-85659-73-3., https://www.intercedu.com/informatic-books

- 2. Schmidt P., Kultan J., Prochádzka P.: Informatika hardvér, https://www.intercedu.com/informatic-books
- 3. Pelikán J., : Matematické základy informatiky ISBN 9788024517780, VYDAVATEĽSTVO Oeconomica
- 4. Matiaško K., Základy informatiky, Vydavateľstvo Edis, 2004
- 5. Venables, V.,M. a kol.: An Introduction to R, https://cran.r-project.org/doc/manuals/r-release/R-intro.pdf

- 6. Danko, J., Šafr, K.: R snadno a rychle 1, Vysoká škola ekonomická v Praze, Nakladatelství Oeconomica Praha 2020, ISBN 978-80-245-2380-4
- 7. Danko, J., Šafr, K.: R snadno a rychle 2, Vysoká škola ekonomická v Praze, Nakladatelství Oeconomica Praha 2020, ISBN 978-80-245-2381-1
- 8. Schmidt, P.: IKT pre začinajúcich používateľov, Bratislava 2013, ISBN 978-80-971532-0-5
- 9. Kaluža, J. Kalužová, L. (2012). Informatika. Ekopress, ISBN: 9788086929835
- 10. Páleš, M. (2019) Jazyk R pre aktuárov. 1. vydanie. Bratislava: Vydavateľstvo Letra Edu, 2019. 349 s. ISBN 978-80-89962-26-6.

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 1037

A	В	С	D	Е	FX
13.79	19.48	21.02	19.09	16.78	9.84

Lecturer: doc. Ing. Jaroslav Kultan, PhD., Ing. Mgr. Peter Schmidt, PhD., Ing. Erika Mináriková

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Internet of Things

FHI/IIA21240/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 2 **Per course:** 0 / 26

Method of study: present

Number of credits: 3

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Exam 60% of the rating. It is performed in the form of a test using a test application. The test verifies the achieved level of educational results A., C., F., G.

Exercises 40%. The content of the exercise is the elaboration and defense of the semester work, which students will work out in groups. Each group has its own group leader, who is chosen by the students. The semester work of the group is evaluated as a whole for the whole group, while the evaluation of the members of the group and their contribution to the elaboration of the semester work is the result of the group agreement. The following educational results are evaluated by the evaluation of the semester work: B., C., D., E., F., G., H., I.

Student workload:

Total study load (in hours):

5 credits \times 26 hours = 130 hrs

Study load distribution:

Health and safety in the hardware laboratory: 2 hrs

Participation in seminars 26 hrs

Preparation for seminars 18 hrs

Elaboration of a semester project 52 hrs

Preparation for the final exam 32 hours

Teaching results:

After completing the course, students should be able to:

- A. Orientation in the conceptual apparatus in the field of IoT
- B. Analyze user needs and formulate the essence of the task
- C. Know more and be able to choose an appropriate method of software and hardware system design for IoT
- D. Create and program your own IoT device or deliver quality assignments to external specialists.
- E. Handle hardware and equipment in a hardware lab safely
- F. Understand the basics of electrical engineering for proper use and interconnection of hardware
- G. Understand the way the development team works and is organized and know how to work as part of a team
- H. Present and defend at a professional level their proposed solutions
- I. Develop technical documentation (report) describing their proposed solution

Indicative content:

- 1. Definition of the Internet of Things, introduction to the issue
- 2. Definition of technical, program, technological and economic preconditions for the implementation of IoT equipment
- 3. Basics of electrical engineering, work in the laboratory
- 4. Basic principles of IoT device design
- 5. Development boards Arduino, NodeMcu and their variants
- 6. Open source software Arduino (IDE)
- 7. Hardware elements of IoT devices (sensors, power elements, ...)
- 8. Libraries of hardware elements
- 9. Web and Cloud interfaces for IoT
- 10. Errors in the creation of IoT devices
- 11. Design and testing of IoT devices
- 12. Security of IoT devices
- 13. Strategies to improve IoT equipment

Support literature:

- 1. Kranz M.: Building the Internet of Things: Implement New Business Models, Disrupt Competitors, Transform Your Industry, John Wiley & Sons, 2016, ISBN: 978-1-119-28566-3
- 2. Li K-Ch., Gupta B., Agrawal D.: Recent Advances in Security, Privacy, and Trust for Internet of Things (IoT) and Cyber-Physical Systems (CPS), Chapman and Hall/CRC, 2020, ISBN 9780367220655
- 3. Malý M.: Hradla, volty, jednočipy, CZ.NIC, 2018, ISBN 9788088168232
- 4. Selecký M.: Arduino Uživatelská příručka, Computer Press, Brno 2016, ISBN: 978-80-251-4840-2
- 5. Serpanos D., Wolf M.: Internet-of-Things (IoT) Systems, Springer International Publishing AG, 2018, ISBN 978-3-319-69715-4
- 6. Voda Z. & tým HW Kitchen: Průvodce světem Arduina, Nakladatelství Martin Stríž, Bučovice 2018, ISBN: --

Syllabus:

Language whose command is required to complete the course:

slovak

Notes:

Assessment of courses

Total number of evaluated students: 39

Α	В	С	D	Е	FX
51.28	30.77	10.26	5.13	2.56	0.0

Lecturer: Ing. Peter Procházka, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | **Title of course:** Introduction to information security

FHI/IIA21200/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 2 **Per course:** 0 / 26

Method of study: present

Number of credits: 3

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Prerequisites:

- final exam - written form, 60% (passing the exam means obtaining a minimum of 51% of the exam grade). The exam consists of two parts: verification of theoretical knowledge (test with different types of questions). The theoretical part verifies the level of learning outcomes A., B, C, D, E.

Exercises:

- independent work and intermediate tests 20%,
- elaboration and presentation of the seminar topic in teams 20%

The following learning outcomes are developed and assessed through the assessment of independent work and the assessment of work in teams: D., E., F., G.

Student workload:

Total study load (in hours):

3 credits x 26 hours= 78 hours

Study load distribution:

Seminar participation: 26 hours Preparation for seminars: 8 hours Project preparation: 10 hours

Preparation for the final exam: 34 hours

Teaching results:

After studying this course, students gain the knowledge and should be able to:

A. understand the basic concepts of cyber security

- B. discuss information and application security, encryption and cryptography, attacks on computer networks and information systems,
- C. understand the use and electronic and digital signatures creation as a part of the digitalization of society
- D. Follow new trends in cyber security also in connection with deep-web and blockchain technologies
- E. use IS security standards (ISO standards, Cyber Security Act) in practice
- F. identify, understand and evaluate the need and possibilities for information protection in the company,
- G. analytically examine the suitability of the IS security design and implementation.

Indicative content:

- 1. Basic concepts of information security, its importance in practice, the consequences of information security negligence in organizations. Information security management.
- 2. Information assets, their attributes.
- 3. Authentication and identification, authentication and identification systems, biometric systems.
- 4. Threats, incidents and classification of computer malware.
- 5. Intentional and unintentional attacks, attack life cycle, consequences of incidents
- 6. Characteristics and types of intentional attacks
- 7. Basics of cryptography (symmetric and asymmetric encryption)
- 8. Different types of virus protection, their quality and use for computers and mobile devices.
- 9. Electronic signature, certification authorities and importance in practice
- 10. Security policies and standards (ISO), security plans and their preparation
- 11. Criteria of security assessment, risk analysis and self-assessment of IT security in the company, security models.
- 12. Work in teams on case studies how to design a security plan
- 13. Analysis of IT security at the university and design of innovations in IT security at the university

Support literature:

- 1. Anderson, R. Security Engeneering 2nd: A guide to building dependable distributed systems: Wiley, 2008.
- 2. Matt Bishop. Compute Security: Art and Science: 2nd Edition, AdisonWesley, 2017.
- 3. William Stallings. Cryptography and Network Security, Global Edition: PrenticeHall, 2016.
- 4. Janošcová, R. Princípy informačnej bezpečnosti. Dostupné na: https://ics.upjs.sk/~jirasek/ops/Janoscova.pdf (dostupné 11,10.2021)
- 5. Hanáček, P., Staudek, J. Bezpečnost informačních systému. 2000, Dostupné: http://media0.vesele.info/files/media0:50f8645ae2040.pdf.upl/uvis_bezpecnost_20000701.pdf (dostupné 12.10.2021)
- 6. Levický, D. Aplikovaná kryptografia, Elfa, 2018
- 7. O'Connor, W.R., Mobile device security, Nova Science Publisher. 2013
- 8. Anonymous, Maximální bezpečnost, Hackeři radí jak nejlépe zabezpečit vaši síť, SoftPress, 2004
- 9. Rakovská, E., Elektronický kurz Ochrana a bezpečnosť IS, LMS Moodle Ekonomickej Univerzity, dostupné na: https://moodle.euba.sk/course/view.php?id=161

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 1

A	В	С	D	Е	FX
0.0	0.0	0.0	100.0	0.0	0.0

Lecturer: RNDr. Eva Rakovská, PhD.

Date of the latest change: 01.02.2022

Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Andrea Furková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Dr. Ing. Miroslav Hudec, Person responsible for the delivery, development and quality of the study programme doc. Ing. Martin Mišút, CSc., Person responsible

for the delivery, development and quality of the study programme prof. Ing. Ivan Brezina, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Jaroslav Kultan, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | Title of course: Knowledge Management Technologies

FHI/IIA21220/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 4

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Exam 60% The exam consists of two parts: the evaluation of the theoretical knowledge and knowledge of modelling of a specific example. The first part, verifies the achievement level of the teaching results A., B., C., whereas the second part verifies the level of the teaching results D, E., F. Assignments during the semester 40% The aim of seminars is developing and defending the project and a short test. On the project, the students belong to smaller groups. Students organize their work in small groups. The evaluation of the results of the group's work (the project) is assessed as a whole for the whole group. The evaluation of the contribution of the individual members is the result of the internal agreement of the group and the subsequent discussion. Evaluation of projects and tests assess the following teaching results of C., D., E. F. G.

Student workload:

Total study load (in hours):

4 credits x 52 teaching hours = 130 h

Distribution of study load:

lectures and seminars participation: 52 h

seminar participation: 13 h project and test preparation: 30 h preparation of exam: 35 h

Teaching results:

In particular, students acquire the following abilities:

A. understanding the difference between data, information and knowledge in enterprises, the life cycle of knowledge in the enterprise and the context of technologies;

B. analyzing the needs for the use of different types of IT for the acquisition, storage, distribution and exploitation of knowledge in enterprises (groupware, workflow, data management, knowledge and experimentation systems, etc.)

C. comprehending the methods of acquisition of automatized and non-automatized knowledge and the methods used from datamining to deep learning

D. identifying and analyzing knowledge processes with emphasis on inferencing and developing rules.

E. dealing with the uncertainties hidden in the information and linguistic variables that are important in real decision-making processes

- F. capturing and managing tacit knowledge for further development in the information and knowledge systems
- G. understanding and applying the basic principles of the use of data acquisition tools (Weka and RapidMiner).

Indicative content:

- 1. Definitions and main concepts of data, information and knowledge
- 2. The relation of data, information and knowledge to knowledge management and information technologies
- 3. Types of knowledge, knowledge life cycle in the enterprise
- 4. Tacit knowledge acquisition and capturing as a part of the knowledge engineering process
- 5. The importance of information and knowledge systems in business practice, the differences between them and their proper use
- 6. Knowledge representations as a core of the knowledge system
- 7. Metadata and knowledge required for building business intelligence and related solutions
- 8. Handling uncertainties in knowledge management technologies
- 9. Linguistic interpretation of knowledge and its formalization by information technologies and computational intelligence.
- 10. Modelling rule-based systems considering uncertainties, the quality of rule-based system and expert's knowledge
- 11. Demonstration of software for managing knowledge in institution and mining knowledge form data
- 12. The role of artificial intelligence in knowledge management
- 13. Web technologies covering the life cycle of knowledge in the enterprise (groupware, semantic web, information retrieval, refinement)

Support literature:

DŽUBÁKOVÁ, M. Znalostný manažment. EKONÓM, Bratislava, 2016.

ENGELBRECHT A.P. Computational Intelligence: An Introduction, 2nd Edition. John Wiley & Sons, Inc., 2007.

GROSSMANN W., RINDERLE-MA S. Fundamentals of Business Intelligence. Springer-Verlag Berlin Heidelberg, 2015.

GYAMFI, A., WILLIAMS, I., Digital Technology Advancements in Knowledge Management, IGI Global, 2021

HAJRIC, E. Knowledge Management Tools - web site, 2010. http://www.knowledge-management-tools.net/ (available 25.10.2021)

HUDEC, M.: Fuzziness in Information Systems – How to deal with Crisp and Fuzzy Data in Selection, Classification and Summarization. Springer, International Publishing Switzerland, 2016

HURWITZ, J.S., KAUFMAN, M., BOWLES, A., Cognitive Computing and Big data analytics, John Wiley & Sons, Inc., 2015.

ROY, A. K., Information and Knowledge Management: Tools, techniques and Practices 1st Edition, NIPA, 2013

SCHREIBER A.TH. et. al. Methodology CommonKADS, web site: http://commonkads.org/(available 25.10.2021)

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 1					
A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Lecturer: doc. Dr. Ing. Miroslav Hudec, RNDr. Eva Rakovská, PhD., Ing. Erika Mináriková

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KM | Title of course: Management

FPM/IMB21007/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 5

Recommended semester/trimester of study: 4.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

- elaboration and presentation of the final project 30%
- case studies 10%
- final exam 60%

Student's workload (in hours):

The student's workload: 130 h. (participation in lectures 26 h, participation in seminars 26 h, preparation for seminars 13 h, elaboration of a semester project 26 h, preparation for the exam 39 h)

Student workload:

Teaching results:

Knowledge

Obtaining a systemic view of management issues with respect to current knowledge and trends in this area and with respect to the dynamics of the external and internal environment. Acquiring comprehensive basic knowledge of management theory in relation to the sustainable development of enterprises in terms of functional, decision-making and information. Understanding of key conceptual apparatus in relation to individual management functions. Acquisition of knowledge in terms of methods and tools used in the implementation of individual management functions. Understanding the interrelationships between the application of soft and hard management tools and the possibilities of their use in practice.

Competence

- to use a set of knowledge about the principles, methods, procedures, and techniques of business management in a market economy,
- to identify, analyze and apply the acquired knowledge in solving problems related to managerial functions,
- to direct the activities of business units, teams, and individuals through managerial functions to achieve set objectives,
- to understand and suggest ways to rationally solve management problems,
- to combine and integrate management knowledge with knowledge from related social science disciplines

Skill

• conceptually solve enterprise problems, identify the most important issues, tendencies, and probabilities of development, and understand things in relation to each other,

- apply specific methods and procedures in management practice,
- effectively guide business processes through techniques and methods of decision making, planning, organizing, human resource management, leading and controlling,
- motivate subordinates and communicate effectively with all company stakeholders,
- work effectively in a team and lead a team.

Indicative content:

Thematic definition of lectures:

- 1. Characteristics and basic background of management.
- 2. Main concepts of management.
- 3. Managerial decision-making.
- 4. Information and information system.
- 5. Strategy and its implementation.
- 6. Planning.
- 7. Organizing as a function of management.
- 8. Management control.
- 9. Human resources management.
- 10. The essence and content of the leadership function of people, leadership styles.
- 11. Communication in management.
- 12. Employee motivation.
- 13. Ethics in management.

Thematic definition of exercises:

- 1. Introduction to management issues.
- 2. Origin, development, and main approaches in management.
- 3. Decision-making processes in management.
- 4. Information and information system.
- 5. Strategic management.
- 7. The essence and content of the organization and organizational structure.
- 8. Management control.
- 9. Human resources management.
- 10. Leading of people.
- 11. Communication.
- 12. Motivation.
- 13. Ethics in management.

Support literature:

Basic literature:

1. ROBBINS, Stephen P. – COULTER, Mary A. Management. Pearson Education, 2021. 624 p. ISBN 9780136714491.

Supplementary literature:

- 1. BATEMAN, Thomas et al. Management: Leading & Collaborating in a Competitive World. 13th ed. McGraw-Hill Education, 672 p. ISBN 978-12-5992-764-5.
- 2. CERTO, Samuel C. CERTO, Trevis S. Modern Management: Concepts and Skills. 15th ed. New York, NY: Pearson, 2019, 501 p. ISBN 978-01-3472-913-8.
- 3. DAFT, Richard L. Management. 12th ed. Cengage Learning, 2015, 800 p. ISBN 978-13-0548-071-1.
- 4. DRUCKER, Peter. Management. Routledge, 2012. 576 s. ISBN 978-11-3600-689-0.
- 5. KOONTZ, Harold WEIHRICH, Heinz. Essentials of management. 10th ed. Chennai: Tata McGraw Hill Education, 2015, 540 pp., Rs. 647, ISBN: 978-9-3392-2286-4.
- 6. LUSSIER, Robert N. Management fundamentals: concepts, applications, and skill development. Thousand Oaks: SAGE Publications, 2019. 597 p. ISBN 9781506389394.

- 7. PLUNKETT, Warren R. Management. 10th ed. South-Western College Pub, 2012, 744 p. ISBN 978-11-1122-134-8.
- 8. SCHERMERHORN, John R Jr. BACHRACH, Daniel G. Exploring Management. 6th ed. John Wiley & Sons, 2017, 348 p. ISBN: 978-1-119-53760-1
- 9. WILKINSON, Adrian et al. The Oxford Handbook of Management. Oxford University Press, 2017, 571 p. ISBN 978-01-9870-861-2.

Syllabus:

Thematic definition of lectures:

- 1. Characteristics and basic background of management. Nature, meaning and tasks of management. The content of management, including the individual functions. Descriptive and normative theory. A systems approach to management. Managerial roles and skills. Managerial competencies. Manager profile. Manager education.
- 2. Main concepts of management. Historical foundations of management. Modern approaches to management: classical, behavioral, modern, empirical school of management, situational approach. Territorial differences in management development. Management in a global environment. New management concepts. Specific management methods and concepts.
- 3. Managerial decision-making. The essence and place of decision-making in management. Elements of the decision-making process. Characteristics and types of decision-making processes and decisions. Stages of the decision-making process. Ways of preparing and taking a decision. Decision-making methods.
- 4. Information and information system. The essence and meanings of the term information. The importance of information for the work of a manager. Lack and excess of information. Classification, aspects, types, sources of information. Information activities and information system. Division of information system, essence, and role. Requirements for an effective information system.
- 5. Strategy and its implementation. Differences and common features of strategy and tactics, classification, and types of strategies. The personality of a strategic manager. Horizontal and vertical structure of strategic management. Corporate, entrepreneurial, functional, and competitive strategy. Strategic management process. Formulation of goals and strategies. Implementation and evaluation of the strategy.
- 6. Planning. The essence, content, and reasons for planning. Integrated business planning system. Types of plans, including a business plan. Functional components of plans. Algorithm for creating business plans. Qualitative and quantitative planning methods and techniques.
- 7. Organizing as a function of management. Organizational differentiation and organizational integration of activities. The process of organizing. Creation of organizational structures. Mechanistic and organic types of organizational structures. Centralization and decentralization. Formality and informality of relationships. Tendencies of development of organizational structures.
- 8. Management control. Stages of the control process, classification of control. Traditional and modern techniques, methods, and procedures of control. Requirements for an effective control system. Relationship among control, monitoring and controlling.
- 9. Human resources management. Content, tasks, theoretical basis of human resources management. Human resources planning and provision. Personnel functions in the company. Evaluation of work performance. Remuneration of employees, benefits. Personnel marketing and personnel audit. Personnel development, education, and career management. Current trends in changes in human resource development, including workplace diversity.
- 10. The essence and content of the leadership function of people, leadership styles. Contrast between manager and leader. Authority and power and its resources. Approaches to effective people management. Coaching and mentoring.

- 11. Communication in management. Structure, types, forms, means, types of managerial communication. Verbal and nonverbal communication. Communication competencies and communication skills. Principles of effective managerial communication. Teamwork.
- 12. Employee motivation. The meaning and content of motivation, stimulation. Behavior of people in the organization, individual and group motivation. The process of motivation. Content and process theories of motivation. Integrative approach in motivation. Motivational programs. Basis of application and approaches used in current motivation programs.
- 13. Ethics in management. Social responsibility and sustainability. Internal and external social environment of the organization. Ethical standards and codes of ethics. Institutionalizing and improving the effectiveness of standards.

Thematic definition of exercises:

- 1. Introduction to management issues. Content and management background. The essence, meaning and tasks of management. Management functions. Manager and his profile. Managerial roles. Managerial competencies.
- 2. Origin, development, and main approaches in management. Analysis of classical and contemporary management concepts in the world. Management in a global environment. New concepts and methods of management.
- 3. Decision-making processes in management. Types of decision-making situations. Decision-making methods.
- 4. Information and information system. Nature and classification of information. Division of information systems and their use in managerial practice.
- 5. Strategic management. Classification and types of strategies. Business environment analysis, formulation, implementation and evaluation and control of strategies.
- 6. Planning. Goals, resources, activities in the company. Nature and types of plans. Time and object criterion of division of plans. Information for the needs of the plan. Control techniques, methods, and procedures.
- 7. The essence and content of the organization and organizational structure. Creating the organizational structure of the company. The essence and dimensions of the organizational structure. Divisional structures. Matrix structures.
- 8. Management control. Types of control. Control techniques, methods, and procedures.
- 9. Human resources management. Job analysis, recruitment activities, selection of employees. Personnel development, remuneration of employees.
- 10. Leading of people. Content, leadership styles. Transformational and transactional leadership style. Visionary and team leadership. Coaching and mentoring.
- 11. Communication. Interpersonal and managerial communication. Intra-company communication. Communication skills active listening, assertiveness, empathy. Teamwork.
- 12. Motivation. Content of motivation and stimulation. Motivational tools. Behavior of people in the organization. Theories of motivation.
- 13. Ethics in management. Social responsibility and sustainability. Analysis of participants as part of corporate social responsibility. Reporting and measuring social responsibility.

Slovak Notes: Assessment of courses Total number of evaluated students: 88

Language whose command is required to complete the course:

A	В	С	D	Е	FX
19.32	19.32	30.68	25.0	5.68	0.0

Lecturer: doc. Ing. Jana Blštáková, PhD., prof. Ing. Nadežda Jankelová, PhD., doc. Ing. Mgr. Zuzana Joniaková, PhD., Ing. Andrea Čambalíková, PhD., Mgr. Oľga Nachtmannová, PhD., Mgr. Martin Novysedlák, PhD., Ing. Richard Bednár, PhD.

Date of the latest change: 02.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Management Science I

KOVE FHI/ IIB21141/22

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 4., 6.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

30 % work at seminars and writing of projects

70 % combined final exam

Student workload:

156 hours

26 hours lecture attendance

26 hours seminar attendance

26 hours preparation for lectures

26 hours preparation for seminars

26 hours writing a seminar paper

26 hours preparation for final exam

Teaching results:

Upon successful completion of the course, students will acquire the following knowledge:

- knowledge of optimization tools designed to analyze economic phenomena and processes,
- knowledge of optimization models and methods designed to model economic phenomena and processes,
- knowledge of optimization methods designed to evaluate and set strategies for economic processes.

Upon successful completion of the course, students will acquire the following skills:

- ability to use optimization models and methods,
- ability to work with adequate software to solve optimization problems.

Upon successful completion of the course, students will acquire the following competencies:

- practical skills and competences with the application of optimization models and methods in the analysis of economic problems in the field of economic practice using adequate software.

Indicative content:

- 1. Quantitative approach to management. Management and operations research, mathematical models and methods in economics. Classification of standard models and methods. Stages of problem solving. Mathematical apparatus for basic models of operations research.
- 2. Structural models of the company. Basic structure of the model, direct and full consumption coefficients of internal and external sources.

- 3. Optimization methods for business management. Mathematical programming problems. The essence of linear programming. Formulation of linear programming problems. Geometric solution of linear programming problems.
- 4. Solving linear programming problems by simplex method.
- 5. Duality in linear programming problems. Economic interpretation of duality.
- 6. Sensitivity analysis of the optimal solution of the linear programming problem.
- 7. Transportation problems and their properties. Formulation of balanced and unbalanced transportation problems.
- 8. Assignment problems and their solutions.
- 9. Basic types of network analysis problems. Network analysis and linear programming. The problem of the shortest path in the network.
- 10. The essence of finding a critical path. CPM and PERT methods.
- 11. Inventory modeling. Nature and classification of inventory models. Deterministic inventory models. Inventory models without deficit and with deficit.
- 12. Modeling of queuing problems. Basic concepts and elements of queuing problem models. Basic models of queuing problems. Models without waiting. Queuing problem models with waiting single-channel, multi-channel.
- 13. Optimization in queuing problem models.

Support literature:

- 1. Brezina, I., Pekár, J.: Úvod do operačného výskumu I. Letra Edu. 2018.
- 2. Brezina, I., Pekár, J.: Úvod do operačného výskumu II. Letra Edu. 2019.
- 3. Brezina, I., Pekár, J: Operačná analýza v podnikovej praxi. Bratislava: Vydavateľstvo EKONÓM 2014
- 4. Ivaničová, Z., Brezina, I., Pekár, J.: Operačná analýza. Bratislava: IURA Edition 2007
- 5. Chocholatá, M., Čičková, Z., Furková, A.: Operačná analýza. Zbierka príkladov. Bratislava: IURA Edition 2008.
- 6. Ivaničová, Z., Brezina, I., Pekár, J.: Operačný výskum, IURA Edition, Bratislava 2002
- 7. Taha, H.A.: Operations Research: An Introduction 10th Edition. Prentice Hall, New Jersey 2017
- 8. Eiselt, H. A., Sandblom, Carl-Louis: Operations Research. Springer 2012.

Syllabus:

Language whose command is required to complete the course: Slovak

Notes:

Assessment of courses

Total number of evaluated students: 974

A	В	С	D	E	FX
39.32	22.38	17.15	10.99	9.75	0.41

Lecturer: prof. Ing. Ivan Brezina, CSc.

Date of the latest change: 21.02.2022

Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Andrea Furková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Dr. Ing. Miroslav Hudec, Person responsible for the delivery, development and quality of the study programme doc. Ing. Martin Mišút, CSc., Person responsible for the delivery, development and quality of the study programme prof. Ing. Ivan Brezina,

CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Jaroslav Kultan, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: Title of course: Management Science II

KOVE FHI/ IIB21142/22

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 5

Recommended semester/trimester of study: 5.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

30 % work at seminars and writing of projects

70 % combined final exam

Student workload:

5 credits \times 26 h = 130 hours

Separate study load for individual educational activities:

student workload: 130 h, participation in lectures 26 h, participation in seminars 26 h, elaboration of a semester project 52 h, preparation for the final exam 26 h

Teaching results:

Students will possess following abilities:

- basic knowledge of econometric approach to the data analysis, analysis of economic phenomena and processes,
- basic knowledge of econometric approach to modeling of economic phenomena and processes.
- basic knowledge of econometric approach to the prediction of economic phenomena and processes.

Students will obtain following skills:

- to use basic econometric techniques
- to use the econometric software
- to use the R programming language for econometric analysis

Students will gain following competences:

- practical competences with the application of econometric methods in the data analysis and in analysis of economic problems using R programming language.

Indicative content:

- 1. Characteristics of econometric approach to the data analysis and analysis of economic phenomena. Econometric model. Phases of econometric modeling
- 2. Two-variable regression model. Deterministic and stochastic part of the model, nature of stochastic term. Standard assumptions of a linear model.
- 3. Estimation of linear model parameters. Least squares method. General linear model.
- 4. Model verification. Coefficient of determination. Testing the statistical significance of individual parameters of the model. Interval estimation and hypothesis testing.

- 5. Qualitative variables and their modeling.
- 6. Regression on dummy variables. Seasonality, fluctuations, structural breaks, and their testing
- 7. Functional forms of regression models log-log model, semi-log models, reciprocal models.
- 8. Violations of the assumptions of the classical model. Autocorrelation detecting and implications, solving, generalized least squares method.
- 9. Introduction to time series analysis. Stationarity of processes and its testing using unit root tests.
- 10. Co-integration of non-stationary time series, Engle and Granger procedure, error correction models and their estimation.
- 11. Applications of single equation econometric models.
- 12. Forecasting. Forecasting error. Confidence interval for the forecasts. Naive forecasts.
- 13. Forecasting application of econometric model.

Support literature:

Lukáčiková, A., Lukáčik, M., Szomolányi, K.: Úvod do ekonometrie s programom Gretl. Bratislava: Letra Edu, 2018.

- 2. Lukáčiková, A., Lukáčik, M., Szomolányi, K.: Ekonometria 1. Bratislava: Ekonóm, 2013.
- 3. Lukáčik, M., Lukáčiková, A., Szomolányi, K.: Ekonometrické modelovanie v programoch EViews a Gretl. Bratislava: Ekonóm, 2011.
- 4. Gujarati, D., Porter, D. Gunasekar, S.: Basic Econometrics. McGraw 5th ed, New York, 2017.

Syllabus:

Language whose command is required to complete the course:

Slovak, English

Notes:

Assessment of courses

Total number of evaluated students: 522

A	В	С	D	Е	FX
10.15	21.26	35.25	23.18	10.15	0.0

Lecturer: prof. Ing. Ivan Brezina, CSc., Ing. Adriana Lukáčiková, PhD.

Date of the latest change: 21.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KMA | **Title of course:** Mathematics I

FHI/IIC21011/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 7

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

The semester work - the written test - 30%,

The final written test (theory and examples) - 70%

Student workload:

Total study load (in hours):

Participation in lectures - 26

Participation in exercises - 26

Preparing for exercise - 26

Preparation for course credit - 26

Exam Preparation (theory) - 26

Exam Preparation (examples) – 52

Total load - 182

Teaching results:

A successful graduate of the course will have knowledge of differential and integral calculus, necessary for the study of other economic subjects. After completing the course, students will receive:

Knowledge and understanding

- understanding the basic principle of differential and integral calculus and their simple applications in economy,
- awareness of the inevitability of the use of quantitative (mathematical) methods in economic applications.

Skills

- students can solve fundamental problems of differential and integral calculus by using appropriate open-source software systems,
- solve fundamental problems of economic analysis and interpret the results of solutions.

Competence

- actively expand their mathematical knowledge and skills and use them in other subjects of quantitative orientation.

Indicative content:

•

Support literature:

- 1. KADEROVÁ, A. KRÁTKA, Z. KRČOVÁ, I. MUCHA, V. ŠOLTÉSOVÁ, T. (2020). Matematika pre ekonómov. Bratislava: Letra Edu.
- 2. KADEROVÁ, A. MUCHA, V. ONDREJKOVÁ KRČOVÁ, I. ŠOLTÉSOVÁ, T. (2016). Matematika pre 1. ročník: učebný text. Bratislava: Vydavateľstvo EKONÓM, online.
- 3. FECENKO, J. PINDA, L. (2006). Matematika 1. IURA EDITION. Bratislava.
- 4. FECENKO, J. SAKÁLOVÁ, K. (2006). Matematika 2. IURA EDITION. Bratislava.

Syllabus:

- 1. Functions of one real variable. Properties of functions. Graphs of functions.
- 2. Functions of economic analysis, their properties and graphs.
- 3. Limit of function. Rules for calculating limits. One-sided limits.
- 4. Continuity of function in point and on the set. Asymptotes.
- 5. Difference quotient and derivative of function. Its geometric and economic interpretation. Tabular differentiation. Differential of function and its applications. L'Hospital rules.
- 6. Marginal value. Elasticity of function. Price elasticity of demand. Monotonicity of function.
- 7. Higher-order derivatives. Convexity and concavity of function. Point of inflection.
- 8. Local extremes. Economic applications. Graphing functions by characteristic points.
- 9. 2-dimensional Euclidean space. The function of two variables. Functions of economic analysis. Homogeneous function.
- 10. Partial function. Partial derivatives. Higher-order partial derivatives. Economic applications of partial derivatives. Marginal value. Partial elasticity.
- 11. Definition of local extremes. Necessary and sufficient condition for local extreme. Economic applications of local extremes.
- 12. Bound extremes. Economic applications of bounded extremes.
- 13. Definition of primitive functions and indefinite integrals. Basic rules of integration and table of standard integrals. Economic application of indefinite integrals.

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 2073

A	В	С	D	Е	FX
6.13	8.2	14.38	21.27	36.57	13.46

Lecturer: Mgr. Ing. Ingrid Krčová, PhD., PaedDr. Zsolt Simonka, PhD., Ing. Michal Závodný, Ing. Patrícia Teplanová

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KMA | **Title of course:** Mathematics II

FHI/IIC21020/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 7

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

The semester work and the written test -30 %

The final written test -70 %

Student workload:

Participation in lectures - 30

Participation in exercises - 30

Preparing for exercises - 30

Preparation for course credit - 30

Individual study in preparation for the exam - 62

Total load - 182

Teaching results:

Knowledge. Understanding of knowledge of basic principles and knowledge of calculations of definite and improper integrals, numerical and functional series and of linear algebra and their applications in economics,

Skills. Acquired knowledge and skills to be able to apply in the field of discrete and continuous random variable, in the field of discrete and continuous financial cash flows, time series, in solving optimal programming problems and in all areas of finding solutions to economic science problems by quantitative methods.

Competences. Actively expand their mathematical knowledge and skills and use them in other subjects of quantitative focus.

Indicative content:

- 1. Definite integral and their calculation. Calculation of area of the region. Economic applications.
- 2. Improper integral. Methods for calculating improper integrals.
- 3. Limit of a sequence. Euler's number. Investigation of convergence and divergence of data series.
- 4. Alternating series. Function series.
- 5. Power series, radius and interval of convergence. Taylor series and development of elementary functions.
- 6. Operations with vectors. Linear combination, dependence and independence. Rank the vectors. Dimension and base of linear space.
- 7. Elementary change of base and its use.
- 8. EZB. Operations with matrices. Decomposition of the matrix to the product.

- 9. Calculation of rank of matrix using EZB. Inverse matrix, matrix equations.
- 10. Economic applications. Determinants of degree n and calculation of them.
- 11. Solution of system of linear equations by method of EZB.
- 12. Solution of SLR by Cramer rule and inverse matrix. Space of solutions. Fundamental system of solutions.
- 13. The system of linear inequalities. Credit exam.

Support literature:

Basic literature:

- 1. FECENKO, Jozef. Nekonečné rady : (číselné, funkcionálne, maticové). 1. vyd. Bratislava : Vydavateľstvo EKONÓM, 2017. online [78 s., 3,67 AH]. ISBN 978-80-225-4387
- 2. SAKALOVÁ, K. SIMONKA, Z. STREŠŇÁKOVÁ, A.: Lineárna algebra pre ekonómov. FHI EU v Bratislave. 1. vydanie. Vydavateľstvo Letra Edu Bratislava 2020. ISBN 978-80-89962-73-3(print). ISBN 978-80-89962-73-0 (online).

Recommended literature:

- 1. KADEROVÁ, A. KRÁTKA, Z. KRČOVÁ, I., MUCCHA, V., ŠOLTÉSOVÁ T.: Matematika pre Ekonómov. Vydavateľstvo Letra Edu Bratislava 2020. ISBN 978-90-89962-73-4(print). ISBN 978-90-89962-63-1 (online).
- 2. FECENKO, Jozef SAKÁLOVÁ, Katarína. Matematika 2. Bratislava : Elita, 1999. 316 s. ISBN 80-85323-85-0

Syllabus:

- 1. Definite integral and their calculation. Calculation of area of the region. Economic applications.
- 2. Improper integral. Methods for calculating improper integrals.
- 3. Limit of a sequence. Euler's number. Investigation of convergence and divergence of data series.
- 4. Alternating series. Function series.
- 5. Power series, radius and interval of convergence. Taylor series and development of elementary functions
- 6. Operations with vectors. Linear combination, dependence and independence. Rank the vectors. Dimension and base of linear space.
- 7. Elementary change of base and its use.
- 8. EZB. Operations with matrices. Decomposition of the matrix to the product.
- 9. Calculation of rank of matrix using EZB. Inverse matrix, matrix equations.
- 10. Economic applications. Determinants of degree n and calculation of them.
- 11. Solution of system of linear equations by method of EZB.
- 12. Solution of SLR by Cramer rule and inverse matrix. Space of solutions. Fundamental system of solutions.
- 13. The system of linear inequalities. Credit exam.
- 1. Definite integral and their calculation. Calculation of area of the region. Economic applications.
- 2. Improper integral. Methods for calculating improper integrals.
- 3. Limit of a sequence. Euler's number. Investigation of convergence and divergence of data series.
- 4. Alternating series. Function series.
- 5. Power series, radius and interval of convergence. Taylor series and development of elementary functions.
- 6. Operations with vectors. Linear combination, dependence and independence. Rank the vectors. Dimension and base of linear space.
- 7. Elementary change of base and its use.

- 8. EZB. Operations with matrices. Decomposition of the matrix to the product.
- 9. Calculation of rank of matrix using EZB. Inverse matrix, matrix equations.
- 10. Economic applications. Determinants of degree n and calculation of them.
- 11. Solution of system of linear equations by method of EZB.
- 12. Solution of SLR by Cramer rule and inverse matrix. Space of solutions. Fundamental system of solutions.
- 13. The system of linear inequalities. Credit exam.

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 2275

A	В	C	D	Е	FX
10.2	9.23	16.88	22.64	28.09	12.97

Lecturer: prof. RNDr. Katarína Sakálová, CSc., Ing. Martina Horváthová, Mgr. Ing. Ingrid Krčová, PhD., RNDr. Anna Strešňáková, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | **Title of course:** Multimedia Applications

FHI/IIA21250/21

Type, load and method of teaching activities: Form of course: Lecture / Practical / Seminar

Recommended load of course (number of lessons):

Per week: 0 / 2 / 2 **Per course:** 0 / 26 / 26

Method of study: present

Number of credits: 4

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Exam 60% of the rating. It is performed in the form of a test using a test application. The test verifies the achieved level of educational results A., E., F., G.

Exercises 40%. The content of the exercise is the elaboration and defense of the semester work, which students will work out in groups. Each group has its own group leader, who is chosen by the students. The semester work of the group is evaluated as a whole for the whole group, while the evaluation of the members of the group and their contribution to the elaboration of the semester work is the result of the group agreement. The following educational results are evaluated by the evaluation of the semester work: B., C., D., E., F., G., H.

Student workload:

Total study load (in hours):

5 credits \times 26 hours = 130 hrs

Study load distribution:

Participation in seminars 26 hrs

Preparation for seminars 20 hrs

Elaboration of a semester project 52 hrs

Preparation for the final exam 32 hours

Teaching results:

After completing the course, students should be able to:

- A. Orientation in the conceptual apparatus in the field of multimedia communication
- B. Analyze the needs of the company as well as target groups.
- C. To formulate the essence of the solved task from the point of view of multimedia communication and also in the mutual connections of individual expressive possibilities of multimedia elements
- D. Create your own multimedia output or deliver quality assignments to external specialists
- E. Understand digital photography, composition, color theory
- F. Be able to work with raster editor, video editing software, 3D modeling program and 3D printer
- G. Understand the way the development team works and is organized and know how to work as part of a team
- H. Present and defend at a professional level their proposed solutions

Indicative content:

1. Definition of Multimedia Systems, introduction to the subject

- 2. Definition of technical, programmatic, technological and economic prerequisites for the realization of multimedia outputs
- 3. Multimedia formats of static and dynamic outputs
- 4. Colour theory, colour depth, colour space
- 5. Digital photography (comparison with analogue photography, basic principles...)
- 6. Composition (people, nature, product, advertising...)
- 7. Working with raster editor
- 8. Typography (essence, laws, use...)
- 9. Graphic design of a web page
- 10. Processing of audiovisual recordings
- 11. Working with video editing software
- 12. 3D modelling (methods and possibilities, modelling with a simple CAD tool)
- 13. 3D printing (methods of creating 3D output, 3D printing technologies)

Support literature:

- 1. Coward C.: Beginner's Guide To 3d Modeling, No Starch Press, US, 2019, ISBN: 1593279264
- 2. Faulkner A., Chavez C.: Adobe Photoshop Classroom in a Book (2020 release), ADOBE PR, 2019, ISBN: 0136447996
- 3. Gitner S.: Multimedia Storytelling for Digital Communicators in a Multiplatform World, Taylor & Francis Ltd, 2015, ISBN: 0765641321
- 4. Holsinger, E.: Jak pracují multimédia, UNIS Publ., Brno 1995, ISBN 1-56276-208-7
- 5. Chapman N.: Digital Multimedia, John Wiley & Sons, 2009, ISBN: 0470512164
- 6. James H.: Getting Started with DaVinci Resolve 17, Anodyne Press LLC, 2021, ISBN: 194502836X
- 7. Kelby S., Dogra S.: Digitální fotografie Krok za krokem k profesionální fotografii, Zoner Press, Brno 2021, ISBN: 978-80-7413-438-8
- 8. Kingová J. A.: Digitální fotografie for Dummies, IDG Czech, a.s., Praha 2000, ISBN 80-86304-00-0
- 9. Kříž M.: Zvuk na PC, Step by step, Mobil Media, Praha 2004, ISBN 80-86593-06-1
- 10. Roubal P.: Fotografie, hudba a video ve Windows Vista, Comp. Press, Praha 2007, ISBN: 978-80-251-1859-7
- 11. Rund F.: Multimédia I, ČVUT Praha, Praha 2016, ISBN: 978-80-01-05859-6
- 12. Schellmann B. a kol.: Média-zákl. pojmy, návrhy, výroba, Europa Sobotáles, Brno 2002, ISBN 80-86-706-06-0
- 13. Schmidt, P., Bandurič, I.: Úvod do tvorby webu1. Bratislava : Vydavateľstvo EKONÓM, 2015. ISBN 978-80-225-4209-8
- 14. Sokolowsky, Šedivá: Multimédiá současnost, budoucnost, Grada, Praha 1994, ISBN –
- 15. Willis J., Dogra S.: Autodesk Fusion 360, Cadartifex, 2019, ISBN: 1096938642

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 13

Α	В	C	D	Е	FX
7.69	76.92	7.69	7.69	0.0	0.0

Lecturer: Ing. Peter Procházka, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | Title of course: Network technologies I

FHI/IIA21150/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 7

Recommended semester/trimester of study: 4.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

final exam - written form, 60% (passing the exam means obtaining a minimum of 51% of the exam grade). The exam consists of two parts: verification of theoretical knowledge (test with different types of questions). The theoretical part verifies the level of learning outcomes A,B,C,D,E a term paper, 40 %, verifying the level of the learning outcomes F,G

Student workload:

Total study load (in hours): 6 credits \times 26 hours = 156 hours

Total student workload: 156 h participation in lectures 26 h, participation in seminars 26 h, preparation for seminars 13 h, elaboration of a semester project 65 h,

preparation for the exam 26 h)

Teaching results:

After completing the course, students should be able to:

- A. Understand the principles of communication in computer networks. B.
- B. Understand the principles of computer network classification and different computer network architectures.
- C. Understand the principles of intrernetworking.
- D. Master the possibilities and trends of data transmission in computer networks.
- E. Master the issues of addressing and routing in computer networks.
- F. To work with Internet services and applications.
- G. Design a website for a specific application area.

Indicative content:

- 1. Data transmission.(nature of data, data interpretation, forms of data transmission, physical data transmission, modulation, types of modulation, AD/DA converter)
- 2. Classification of computer networks (classification in terms of size, topology, type of data transmission, transmission medium, method of access to resources, method of interconnection, technologies used etc.).
- 3. Computer network architectures (topologies of computer networks, relevant technological background, technical means used, methods of modelling the PS architecture).

- 4. Communication infrastructure (DialUp, ISDN, ATM, ADSL, SDSL, XDSL, etc.)
- 5. Data transmission options and trends (types of interconnection, circuits, packets, cells, messages, access methods.
- 6. Wifi networks (characteristics of IEEE 802.11, 802.11a,b,g, n, y, ac, ad, wifi AP, Bridge, repeater modes, wifi security, security protocols WPA, WPA2, AES, TKIP, WPS, wifi router configuration)
- 7. Optical technologies (optical fibre, optical signal transmission method, differences between mono and multimode transmission, multipexing, fibre splicing, input/output devices, connectors, media converters, optical circuit formation).
- 8. ISO-OSI reference model, Novel Netware, TCP/IP protocols, TCP/IP layer structure, TCP/IP active elements, repeater, bridge, halfbridge, backbone.
- 9. Computer network integration (internetworking, coexistence of IP, TCP, RIP, OSPF, BGP, UDP, ICMP, DHCP, etc., getway, router, switch...)
- 10. Internet: Internet addressing IP v4, IPv6, IP address, address space, , subnet mask, subnetting, clasfull, classles addressing, VLSM, CIDR notation,
- 11. Internet services (DNS, SMTP, POP3, IMAP, FTP, http, telnet, Whois, IRC, Computer network security SSL.
- 12. World Wide Web principles, html, htttp, shttp, web servers Apache, NGINX, IIS, web browsers, server side and client side scripting languages.
- 13. Internet applications (web applications, web services, interactive websites, social networks google, facebook, youtube, etc.).

Support literature:

- 1. Schmidt, P: Základy informačných sietí, AZ print, 2017
- 2. Tanenbaum, A.S.: Computer networks, Prentice Hall, 1989.
- 3. Sportack, M., A.: Směrování v sítích IP, Computer press, Brno 2004.
- 4. Hunt, C.: Konfigurace a správa sítí TCP/IP, Computer press, Brno 1997.
- 5. Kálay, F. Peniak, P.: Počítačové sítě a jejich aplikace, Grada, Praha 2003.
- 6. Bonaventure, O.: Computer Networking : Principles, Protocols and Practice Release 0.25, The Saylor Foundation, 2011
- 7. Sosinsky, B. Networking Bible. Wiley Publishing Inc. 2009

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 573

A	В	C	D	Е	FX
19.02	27.57	27.75	17.45	6.98	1.22

Lecturer: Ing. Mgr. Peter Schmidt, PhD.

Date of the latest change: 01.02.2022

Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Andrea Furková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Dr. Ing. Miroslav Hudec, Person responsible for the delivery, development and quality of the study programme doc. Ing. Martin Mišút, CSc., Person responsible for the delivery, development and quality of the study programme prof. Ing. Ivan Brezina,

CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Jaroslav Kultan, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI Title of course: Network technologies II

FHI/IIA21155/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 2 **Per course:** 0 / 26

Method of study: present

Number of credits: 4

Recommended semester/trimester of study: 5.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

final exam - written form, 60% (passing the exam means obtaining a minimum of 51% of the exam grade). The exam consists of two parts: verification of theoretical knowledge (test with different types of questions). The theoretical part verifies the level of learning outcomes A,B,C Semester work, 40%, verifies the level of learning outcomes D,E.

Student workload:

Total study load (in hours): 4 credits \times 26 h = 104 h

Student load distribution

participation in exercises, seminars 26 h,

preparation for seminars 13 h,

preparation for individual written work 30 h,

preparation for the exam 35 h.

Teaching results:

After completing the course students:

- A. understand the network communication between the web part of the application and the server part of the application,
- B. understand the network communication between the server part of the application and the database part of the application,
- C. be able to understand the differences in different types of database communication standards (JDBC, ODBC),
- D. be able to design and build an application using appropriate procedures and models (MVC),
- E. will be able to use tools (IDE) to develop applications that use network communication WEB server database on the example of Java.

Indicative content:

- 1. Basic principles of Java application project structure in the development tool
- 2. Java syntax. Comparison with other languages
- 3. Basic principles of object program creation
- 4. Advanced principles of object-oriented programming in Java
- 5. Basic frameworks and libraries
- 6. JPA Java Persistence API
- 7. Java and database access. JDBC.

- 8. JEE (Web) Servlets
- 9. JSP and HTML pages
- 10. Web servers for Java applications. Application servers.
- 11. Basics of working with versioning tools (Git, SVN)
- 12. Communication in a web application MVC and REST API
- 13. Java virtual machine as a platform for other programming languages

Support literature:

- 1. I. Bandurič: Tvorba aplikácii v jazyku Java. Ekonóm. 2013
- 2. K. Sierra: Head First Java. O'Reilly Media, 2005
- 3. J. Bloch: Java efektivne. Grada, 2002
- 4. J. Bloch: Effective Java, Addison-Wesley Professional, 2018
- 5. E. Freeman: Head First design patterns, O'Reilly Media, 2004

Syllabus:

Language whose command is required to complete the course:

Notes:

Assessment of courses

Total number of evaluated students: 524

A	В	С	D	Е	FX
11.45	14.89	41.22	24.62	6.68	1.15

Lecturer: Ing. Mgr. Peter Schmidt, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | **Title of course:** Operating Systems

FHI/IIA21140/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 4 **Per course:** 0 / 52

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 4.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Exercises 40% of the course evaluation

Students on the subject install the operating system environment in a virtual environment, either on the platform of the chosen provider (eg Google Cloud Platform) or in a virtual environment directly in the PC (eg Oracle Virtualbox). Subsequently, the installed OS student trains to configure and run system services, which serve as another extension for users in the system. Such exemplary services may be, for example, the installation of a web server or database server or other operating system services. The work on the exercises is also mastered the basics of scripting languages, especially in the Linux operating system (bash language) and also the basic configuration in Windows. Verification of practical skills takes place directly at the exercises, where several students are randomly selected who demonstrate the acquired knowledge (points A to G) or together with the teacher solve the current problems that arise in the implementation of solutions. The theoretical part of the course is provided in the form of presentations, where students present knowledge of the topic they have worked on (H).

Exam 60% of the course evaluation

Verification of the acquired knowledge is performed during the semester in the form of a test and at the end of the semester in the form of a test and an oral exam (the theoretical knowledge base A to G is verified).

Student workload:

Student workload (in hours):

156 h (participation in seminars 26 h, preparation for seminars 23 h, elaboration of a semester project 25 h, preparation for a credit test 30 h, preparation for the exam 52 h)

Teaching results:

After completing the course, the student has the following knowledge:

- A. installing the operating system
- B. configuring basic OS settings
- C. performing copy, create, and delete operations using OS commands
- D. installing OS services, such as a web server or database server
- E. configuring services according to point D
- F. be able to solve problems with the help of information sources from documentation or the Internet

G. to analyze and solve possible problems with the correct functioning of OS and services by means of records of OS and services running in it

H. present the results after studying the identified theoretical issues

Indicative content:

- 1. Introduction to operating systems
- 2. Processes and classes
- 3. Memory management
- 4. File systems
- 5. Input output
- 6. Jams
- 7. Virtualization and cloud
- 8. Multiprocessor systems
- 9. Security
- 10. Operating system installation and configuration.
- 11. Installation and use of virtual environment.
- 12. Work with files and directories and management of relevant permissions.
- 13. Using commands in Linux shell.

Support literature:

Stallings, W.: Operating systems: Internals and Design Principles 9th ed., Pearson, 2018.

- Tanenbaum, A.S., Bos, H.: Modern Operating Systems. 4th edition, Pearson, 2015. ISBN 0130313580.
- Nemeth E., Snyder G., Hein T.: LINUX kompletní príručka administrátora (2. akt. vydání), Computer Press, Brno, 2008.
- Schmotzer, M.: Operačné systémy. UPJŠ Košice, skriptá 2006.
- Šechný, M.: Operačné systémy (GNU/Linux). Učebný text pre stredné a vysoké školy, elektronická verzia, 2021.

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 573

A	В	С	D	Е	FX
15.36	28.1	25.83	16.93	13.26	0.52

Lecturer: Ing. Pavol Sojka, PhD., Ing. Mgr. Peter Schmidt, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KET | **Title of course:** Principles of Economics

NHF/INE22001/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 1.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

individual work, written test, team work, written exam

Seminars 40%, of which:

Activity at seminars 15%

Elaboration and presentation of a team

case study 10% Written tests. 15%

Final written exam 60%

Student workload:

Total student workload: 156 hours. Of which: Face to face instruction - lectures: 26 hours Face to face instruction - seminars: 26 hours

Preparation for seminars: 13 hours

Preparation of a team case study: 18 hours Preparation for written tests: 21 hours Preparation for the final exam: 52 hours

Teaching results:

Knowledge:

Students acquire introductory knowledge of economics. They are able to understand the behaviour of economic agents at the micro level and understand key macroeconomic variables and interaction between them.

Competences:

Students acquire competences in the field of analysis of functioning of a market and behaviour of economic agents, as well as analysis of the development of macroeconomic variables and understanding relationship between them.

Skills.

The course develops analytical and presentation skills of students and ability to work in a team.

Indicative content:

Subject and methodology of economics. Economic principles, types of economies. Key economic problems. Market and market mechanism, demand, supply, equilibrium price. Elasticity of demand and supply. Consumer behaviour in a market economy in perfectly competitive market. Decision-

making of firms in the market for goods and services in a competitive market and in individual forms of imperfect competition. Market for factors of production, income distribution, income inequalities at the national and global levels, alternative ways to address them. Macroeconomic equilibrium, aggregate demand and aggregate supply. Measuring economic performance, aggregate demand and aggregate supply. Macroeconomic equilibrium. Consumption, savings and investment. Economic growth and business cycle. The monetary sector of the economy, price stability and monetary policy. Government budget, public debt and fiscal policy. Introduction into open economy macroeconomics.

Support literature:

PARKIN, M.: Economics, 12th edition. Harlow: Pearson Education, 2016.

MANKIW, G.M.: Principles of Economics, 8th edition. Boston: Cengage Learning, 2017.

LEVITT, D. S. – DUBNER, S. J.: Freakonomics (A Roque Economist Explores the Hidden Side of Everything). William Morrow Ltd., 2006.

LEVITT, D. S. – DUBNER, S. J.: SuperFreakonomics, William Morrow Ltd., 2011.

THALER, R. – SUNSTEIN, C. R.: Nudge (Improving Decisions about Health, Wealth and Happiness. Yale University Press, 2008.

WHEELAN, CH.: Naked Economics: Undressing the Dismal Science, 3rd edition. W. W. Norton & Company, 2019.

ACEMOGLU, D. – ROBINSON, J.: Why Nations Fail: The Origins of Power, Prosperity, and Poverty. Currency, 2013.

Support literature:

Compulsory literature:

- 1. PARKIN, M.: Economics, 12th edition. Harlow: Pearson Education, 2016.
- 2. MANKIW, G.M.: Principles of Economics, 8th edition. Boston: Cengage Learning, 2017. Suggested readings:
- 1. LEVITT, D. S. DUBNER, S. J.: Freakonomics (A Roque Economist Explores the Hidden Side of Everything). William Morrow Ltd., 2006.
- 2. LEVITT, D. S. DUBNER, S. J.: SuperFreakonomics, William Morrow Ltd., 2011.
- 3. THALER, R. SUNSTEIN, C. R.: Nudge (Improving Decisions about Health, Wealth and Happiness. Yale University Press, 2008.
- 4. WHEELAN, CH.: Naked Economics: Undressing the Dismal Science, 3rd edition. W. W. Norton & Company, 2019.
- 5. ACEMOGLU, D. ROBINSON, J.: Why Nations Fail: The Origins of Power, Prosperity, and Poverty. Currency, 2013.
- 6. Econ Talk, available at: econtalk.org
- 7. Financial Times, available at: ft.org
- 8. Freakonomics, available at: freakonomics.org
- 9. Marginal revolution university, available at: mru.org

Syllabus:

Lectures/seminars topics

WEEK 1

Introduction to economics.

Definition of economics. Micro and macroeconomics. Two approaches to economics (positive and normative economics). Methodology of economics. Basic economic laws. Basic issues of the organization of the economy and their solution in different economic systems. Production possibility frontier, its applications and role in economics.

WEEK 2

Market and market mechanism. Demand, supply and equilibrium price.

Market mechanism and its functioning. Market failures, externalities, and public goods. Demand and demand curve, law of diminishing demand. Factors influencing the size of demand and the shift of the demand curve. Supply and supply curve, law of increasing supply. Factors influencing the size of supply and the shift of the supply curve. Individual, market and aggregate demand. Individual, market and aggregate supply. Market equilibrium, equilibrium price and equilibrium quantity.

WEEK 3

Elasticity of demand and supply.

Elasticity of demand – concept, factors influencing price elasticity of demand. Price elasticity of demand and its effect on total revenue. The relevance of the concept of elasticity for decision making process of companies. Price elasticity of demand and cross elasticity. Price elasticity of supply – calculation and factors influencing elasticity of supply. The relevance of elasticity in decision making process of firms.

WEEK 4

Consumer equilibrium.

Neoclassical theory. Cardinal and ordinal utility theory. Consumer equilibrium and the marginal utility theory in cardinal utility theory. Indifference analysis (indifference curve, indifference map, budget line) and consumer equilibrium in ordinal theory of utility. The impact of the good price and income changes on consumer equilibrium.

WEEK 5

Costs, revenues and profit of the firm. Firm in a competitive market.

Firm and its main goal. Costs and cost in the short run and in the long run. Total, average and marginal costs. Firm revenues. Main features of a competitive market. Individual demand for the firm's production. Equilibrium of a firm in a competitive market in the short and in the long run. WEEK 6

Imperfectly competitive market structures, monopoly, oligopoly, monopolistic competition. Causes of imperfection structure and its forms. Monopoly, types of monopoly. Equilibrium of a monopoly in the short and in the long run. Price discrimination. Inefficiency of a monopoly. Oligopoly and its forms. Equilibrium of an oligopoly firm in different models. Characteristics of monopolistic competition. Equilibrium of a firm in monopolistic competition in the short- and in the long-runs.

WEEK 7

Market of factors of production. Income distribution.

Demand for production factors as a derived demand. Marginal productivity theory and decision of a firm on the optimal amount of inputs. Individual markets for inputs. Labour market – labour supply and labour demand. Substitution and income effect of the wage change. Imperfections on the labour market. Market for land –supply and demand of land, market equilibrium. Capital market –supply and demand of capital, market equilibrium. Income distribution, measuring income inequality. Sources of income inequality, the analysis of its roots.

WEEK 8

Measuring macroeconomic performance, AD and AS model.

Measuring of economic activity – GDP, methods of GDP calculation, nominal and real GDP. Net domestic product, gross national product, net national product, national income. Alternative ways of measuring economic performance. Definition of aggregate demand and aggregate supply, factors influencing the size of AD and AS, alternative approaches to AD and AS. The use of the AD-AS model in macroeconomic analysis.

WEEK 9

Consumption, savings and investment.

Consumption as the largest component of aggregate demand. Changes in consumption and their effect on AD. Consumption function, average propensity to consume and marginal propensity to

consume. Savings and savings function. Average and marginal propensity to save. Expenditure equilibrium in a closed economy. Investment and its effects. Investment multiplier and its relevance, investment accelerator.

WEEK 10

Economic growth and business cycle.

Economic growth, its measurement. Sources of economic growth. Ways to ensure sustainable economic growth. Problems of economic growth in developed and less developed countries. Business cycle – its phases. Impact of the business cycle on key macroeconomic variables. Business cycle caused by shocks in aggregate demand and aggregate supply. Business cycle in the AS-AD model. Okun law.

WEEK 11

Money, inflation, unemployment.

The nature and functions of money. Money supply and monetary aggregates. Money demand and money demand theories, liquidity preference theory and quantitative theory of money. Creation of bank money and money market multiplier. Inflation and its measurement. Demand pull inflation and cost push inflation. Costs of inflation. Deflation and its impact on the economy. Unemployment and measurement of unemployment. Forms of unemployment. Natural rate of unemployment. Phillips curve and its versions.

WEEK 12

Fiscal policy. Monetary policy.

Fiscal policy. Revenues and expenditures of government budget. Government budget deficit and public debt. Fiscal policy objectives and measures. Stabilization fiscal policy. Automatic stabilizers. Discretionary fiscal policy and discretionary fiscal policy instruments. Short-term and long-term effects of fiscal policy in the AS-AD model, impacts of the fiscal policy on AD and AS. Monetary policy, monetary policy objectives and measures. Types of monetary policy. Monetary policy transmission mechanism. Indirect monetary policy instruments. Short-term and long-term impacts of the monetary policy in the AS-AD model. Non-standard monetary policy instruments.

WEEK 13

International trade, international monetary relations.

The nature and causes of the existence of international trade. Theories of international trade, absolute advantage and comparative advantage. Foreign trade policy instruments – tariffs and quotas and their effects on the efficiency of resource allocation. International movement of capital and its forms. Equilibrium on the international capital market. Balance of payments and its structure. Exchange rate and its formation on foreign exchange market. Exchange rate systems. International monetary system.

Language whose command is required to complete the course:

Notes: Assessment of courses Total number of evaluated students: 510 A B C D E FX 1.96 6.47 17.84 25.29 30.0 18.43

Lecturer: Ing. Karol Trnovský, PhD., Dr. habil. Ing. Mgr. Zsolt Horbulák, PhD., Ing. Ivana Lennerová, PhD., Ing. Eleonóra Matoušková, PhD., prof. Ing. Magdaléna Přívarová, CSc., doc. Ing. Marta Martincová, CSc., Ing. Peter Adamovský, PhD., Ing. Zuzana Brinčíková, PhD., prof. Ing. Anetta Čaplánová, PhD., Ing. Ľubomír Darmo, PhD., prof. Dr. Sophia Dimelis, Ph.D., Ing. Ivan Francisti, John Gilbert, doc. Ing. Vieroslava Holková, CSc., Ing. Peter Leško, PhD., Ing. Róbert Mészáros, MBA, Ing. Mgr. Hussein Mkiyes, B.Sc., prof. Ing. Eva Muchová, PhD., Ing.

Marcel Novák, PhD., Ing. Andrej Přívara, PhD., Ing. Eva Sirakovová, PhD., László Szakadát, Ing. Matej Valach, PhD., Ing. Lucia Johanesová, Ing. Peter Martiška, Mgr. Lucia Kováčová, M.A.

Date of the latest change: 03.02.2022

University: Universit	y of Economics in Bratislav	à		
Faculty: Faculty of E	conomic Informatics			
Course code: KAI FHI/IIA21960/22	Title of course: Seminar to Final Thesis I			
Form of course: Le	of course (number of less course: 0 / 26	ons):		
Number of credits: 2				
Recommended seme	ster/trimester of study:			
Degree of study: I.				
Prerequisites:				
Requirements to con	nplete the course:			
Student workload:				
Teaching results:				
Indicative content:				
Support literature:				
Syllabus:				
Language whose con	nmand is required to comp	lete the course:		
Notes:				
Assessment of course Total number of eval				
	NZ	Z		
	0.66 99.34			
Lecturer:				
Date of the latest change: 31.03.2022				
	1 2	on responsible for the delivery, development and		

University: Universit	y of Economics in Bratislav	a			
Faculty: Faculty of E	conomic Informatics				
Course code: KAI FHI/IIA21970/22	I Title of course: Seminar to Final Thesis II				
Form of course: Le	of course (number of less course: 0 / 26	ons):			
Number of credits: 2					
Recommended seme	ster/trimester of study:				
Degree of study: I.					
Prerequisites:					
Requirements to con	nplete the course:				
Student workload:					
Teaching results:					
Indicative content:					
Support literature:					
Syllabus:					
Language whose con	nmand is required to comp	lete the course:			
Notes:					
Assessment of course Total number of eval					
	NZ	Z			
	3.96 96.04				
Lecturer:	Lecturer:				
Date of the latest change: 31.03.2022					
11	1	on responsible for the delivery, development and			

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: CTVŠ | Title of course: Sport

EU/ITA150101L/21

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 1

Recommended semester/trimester of study: 2.

Degree of study:

Prerequisites:

Requirements to complete the course:

tests throughout semester

credits

tests - somatometric, motoric and functional

Student workload:

26

Teaching results:

Compensation of mental load, influence on physical, functional and motoric development. Prevention of civilizational diseases, metabolic syndrom and diseases caused by sedentary lifestyle. Forming of lasting relationship with sport, gaining knowlage about proper nutrition and lifestyle. Improvement of basic motoric skills, improvement of typological parameters.

Indicative content:

According to individual physical activities: aerobics, basketball, badminton, bodywork, fitball aerobics, floorball, football, futsal, interval training, yoga, fitness running, fitness bodybuilding, summer courses, modern dance, pilates, swimming, relax stretching, step aerobics, table tennis, tabata, theoretical lectures, tennis, hiking, volleyball, winter courses.

Support literature:

- 1. BEAN, A., 2008. The Complete Guide to Strength Training. London: A& C Black. ISBN 978-1-408-10539-9.
- 2. SCHUMANN, M. and B. R. RØNNESTAD, 2018. Concurrent Aerobic and Strength Training: Scientific Basics and Practical Applications. Switzerland: Springer International Publishing AG, part of Springer Nature 2019. ISBN 978-3-319-75546-5.
- 3. BERNING, J. R. and S. N. STEEN, 2005. Nutrition for Sport and Exercise. United States of America: Jones and Bartlett Publishers. ISBN 0-7637-3775-5.
- 4. NATHIAL, S. M., 2020. Anatomy and Physiology of Physical Education. India: Friends Publications. ISBN 978-93-88457-79-8.
- 5. TORABI, M. R., K. L. FINLEY and C. O. OLCOTT, 2013. Healthy Lifestyle: Top ten Preventable Causes of Premature Death with Real Stories of Change. Bloomington: AuthorHouse. ISBN 978-1-4817-1617-8.

6. MORIN, A. J. S., C. M. D. TRACEY and R. G. CRAVEN, 2017. Inclusive Physical Activities: International Perspectives. United States of America: Information Age Publishing. ISBN 978-1-68123-852-4.

Syllabus:

Language whose command is required to complete the course:

Slovak language/English language

Notes:

Completion of summer/ winter physical education course/camp

Assessment of courses

Total number of evaluated students: 557

NZ	Z
0.0	100.0

Lecturer: Mgr. Dana Čechvalová, PaedDr. Július Dubovský, Mgr. Martin Hančík, Mgr. Roman Heriban, Mgr. Peter Hložek, PaedDr. Ján Janík, PaedDr. Mária Kalečíková, Mgr. Drahomíra Lorincziová, PhD., Mgr. Eva Matulníková, Mgr. Saša Orviský, Mgr. Igor Partl, PaedDr. Lenka Podgórska, Mgr. Eva Ráková, PaedDr. Viktor Škultéty, Mgr. Zuzana Voltnerová, Mgr. Anita Lámošová, Mgr. Katarína Péliová, PhD.

Date of the latest change: 21.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: CTVŠ | Title of course: Sport

EU/ITA150101Z/21

Type, load and method of teaching activities:

Form of course: Practical

Recommended load of course (number of lessons):

Per week: 2 Per course: 26 Method of study: present

Number of credits: 1

Recommended semester/trimester of study: 1.

Degree of study:

Prerequisites:

Requirements to complete the course:

tests throughout semester

credits

tests - somatometric, motoric and functional

Student workload:

26

Teaching results:

Compensation of mental load, influence on physical, functional and motoric development. Prevention of civilizational diseases, metabolic syndrom and diseases caused by sedentary lifestyle. Forming of lasting relationship with sport, gaining knowlage about proper nutrition and lifestyle. Improvement of basic motoric skills, improvement of typological parameters.

Indicative content:

According to individual physical activities: aerobics, basketball, badminton, bodywork, fitball aerobics, floorball, football, futsal, interval training, yoga, fitness running, fitness bodybuilding, summer courses, modern dance, pilates, swimming, relax stretching, step aerobics, table tennis, tabata, theoretical lectures, tennis, hiking, volleyball, winter courses.

Support literature:

- 1. BEAN, A., 2008. The Complete Guide to Strength Training. London: A& C Black. ISBN 978-1-408-10539-9.
- 2. SCHUMANN, M. and B. R. RØNNESTAD, 2018. Concurrent Aerobic and Strength Training: Scientific Basics and Practical Applications. Switzerland: Springer International Publishing AG, part of Springer Nature 2019. ISBN 978-3-319-75546-5.
- 3. BERNING, J. R. and S. N. STEEN, 2005. Nutrition for Sport and Exercise. United States of America: Jones and Bartlett Publishers. ISBN 0-7637-3775-5.
- 4. NATHIAL, S. M., 2020. Anatomy and Physiology of Physical Education. India: Friends Publications. ISBN 978-93-88457-79-8.
- 5. TORABI, M. R., K. L. FINLEY and C. O. OLCOTT, 2013. Healthy Lifestyle: Top ten Preventable Causes of Premature Death with Real Stories of Change. Bloomington: AuthorHouse. ISBN 978-1-4817-1617-8.

6. MORIN, A. J. S., C. M. D. TRACEY and R. G. CRAVEN, 2017. Inclusive Physical Activities: International Perspectives. United States of America: Information Age Publishing. ISBN 978-1-68123-852-4.

Syllabus:

Language whose command is required to complete the course:

Slovak language/English language

Notes:

Completion of summer/ winter physical education course/camp

Assessment of courses

Total number of evaluated students: 686

NZ	Z
0.0	100.0

Lecturer: PaedDr. Július Dubovský, Mgr. Roman Heriban, Mgr. Peter Hložek, PaedDr. Ján Janík, PaedDr. Mária Kalečíková, Mgr. Drahomíra Lorincziová, PhD., Mgr. Saša Orviský, PaedDr. Lenka Podgórska, PaedDr. Viktor Škultéty, Mgr. Zuzana Voltnerová, Mgr. Katarína Péliová, PhD.

Date of the latest change: 21.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KŠ | **Title of course:** Statistical Methods I

FHI/IID22002/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 2.

Degree of study: I.

Prerequisites:

Requirements to complete the course:

30% assignments (2 assignments)

70% final exam (30% theoretical part, 40% practical part)

Student workload:

Total study load (in hours): 156 hours

Distribution of study load Lectures participation: 26 hours Seminar participation: 26 hours Preparation for seminars: 26 hours Preparation for assignments: 39 hours Preparation for final exam: 39 hours

Teaching results:

After successful completion of this class, students will be able to make elementary statistical analyses based on descriptive statistics and statistical inference and will be able to interpret the results of these analyses correctly.

In particular, students will acquire the following abilities:

- Students will acquire knowledge about the descriptive statistics through which they will be able to describe properties of the statistical dataset.
- Students will acquire knowledge about the theoretical distributions of statistical variables and about the principles of statistical inference.
- They will get acquainted with the principle of the one-way ANOVA and will acquire knowledge to verify the assumptions of ANOVA.

Students will acquire in particular the following skills:

- Students will be able to perform calculations for the relevant statistical procedures (descriptive statistics, statistical inference), both by their own calculations as well as with the use of a statistical software (e.g. SAS, Statgraphics).
- Students will learn to adequately interpret the results.

Students will acquire the following competencies:

- Students will be able to use the above stated knowledge and skills in solving practical tasks from economic practice.

Indicative content:

The course Statistical methods I provides students with basic knowledge of two areas of statistics, namely descriptive statistics and statistical inference. In this course, students will acquire the knowledge and skills needed to understand other statistical (but also generally quantitative) methods and procedures.

Support literature:

Labudová, V., Pacáková, V., Sipková, Ľ., Šoltés, E., Vojtková, M. (2021). Štatistické metódy pre ekonómov a manažérov. Bratislava: Iura Edition.

Šoltés, E. a kol. (2018). Štatistické metódy pre ekonómov – zbierka príkladov. Bratislava: Iura Edition.

Marek, L. a kol. (2007). Statistika pro ekonomy. Praha: Kamil Mařík – Professional Publishing. Marek, L. a kol. (2015). Statistika v příkladech (2. vyd.). Praha: Kamil Mařík – Professional Publishing.

Johnson, R. A., Bhattacharyya, G. K. (2019). Statistics: principles and methods. John Wiley & Sons.

Literature will be continuously updated with the latest scientific and professional titles.

Syllabus:

Syllabus:

- 1. Basic statistical terms.
- 2. Tabular and graphical presentation of statistical data.
- 3. Descriptive statistics (measures of location, measures of variability)
- 4. Descriptive statistics (measures of distribution shape)
- 5. Probability distributions. Sampling distributions. Central limit theorem.
- 6. Basic terms of statistical inference. Random sampling techniques. Point estimates and their properties.
- 7. Principle of interval estimates. Interval estimates of a population mean, variance and proportion.
- 8. Principle of hypothesis tests. Hypothesis tests about a population mean, variance and proportion.
- 9. Inferences about two population means, two variances and two proportions.
- 10. Analysis of variance (One-way ANOVA).
- 11. Assumptions for ANOVA.
- 12. Tests of Goodness of fit.
- 13. Summary.

Language whose command is required to complete the course:

Slovak

Notes:

Assessment of courses

Total number of evaluated students: 3391

A	В	С	D	Е	FX
7.02	13.45	19.26	27.1	27.19	5.99

Lecturer: Ing. Ján Bolgáč, Ing. Ľubica Hurbánková, PhD., Ing. Silvia Komara, PhD., RNDr. Eva Kotlebová, PhD., doc. RNDr. Viera Labudová, PhD., doc. Ing. Ľubica Sipková, PhD., RNDr. Daniela Sivašová, PhD., prof. Mgr. Erik Šoltés, PhD., doc. Ing. Mária Vojtková, PhD.

Date of the latest change: 07.02.2022

Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Andrea Furková, PhD., Person responsible for the delivery, development and

quality of the study programme doc. Dr. Ing. Miroslav Hudec, Person responsible for the delivery, development and quality of the study programme doc. Ing. Martin Mišút, CSc., Person responsible for the delivery, development and quality of the study programme prof. Ing. Ivan Brezina, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Jaroslav Kultan, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KŠ | **Title of course:** Statistical Methods II

FHI/IID22007/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 2 / 2 **Per course:** 26 / 26

Method of study: present

Number of credits: 6

Recommended semester/trimester of study: 3.

Degree of study: I.

Prerequisites: KŠ FHI/IID22001/21-Statistical Methods I

Requirements to complete the course:

30% assignments (2 assignments)

70% final exam (30% theoretical part, 40% practical part)

Student workload:

Total study load (in hours): 156 hours

Distribution of study load Lectures participation: 26 hours Seminar participation: 26 hours Preparation for seminars: 26 hours Preparation for assignments: 39 hours Preparation for final exam: 39 hours

Teaching results:

After successful completion of this class, students will be able to analyze relationship between 2 statistical variables by means of simple linear regression, correlation analysis and categorical data analysis. Moreover, students will be able to do analyses of economic indicators based on time series analysis and index numbers.

In particular, students will acquire the following abilities:

- Students will acquire knowledge about the terms, principles and methods used in the mentioned areas of statistics.

Students will acquire in particular the following skills:

- Students will be able to perform calculations for the relevant statistical procedures (simple linear regression analysis, correlation analysis, analysis of contingency table, time series analysis, index numbers), both by their own calculations as well as with the use of a statistical software (e.g. Statgraphics, SAS).
- Students will learn to adequately interpret the results.

Students will acquire the following competencies:

- Students will be able to use the above stated knowledge and skills in solving practical tasks from economic practice.

Indicative content:

The course Statistical Methods II provides students with basic knowledge of 4 areas of statistics, namely regression and correlation analysis, analysis of categorical data, time series analysis,

comparison in statistics (index numbers). This knowledge is necessary for the analysis of relationships of 2 statistical variables and for the analysis of changes and development of 1 statistical variable over time. The whole course Statistical Methods (I and II) provides the knowledge and skills necessary for the acquisition of other statistical and econometric methods and procedures.

Support literature:

Labudová, V., Pacáková, V., Sipková, Ľ., Šoltés, E., Vojtková, M. (2021). Štatistické metódy pre ekonómov a manažérov. Bratislava: Iura Edition.

Šoltés, E. a kol. (2018). Štatistické metódy pre ekonómov – zbierka príkladov. Bratislava: Iura Edition.

Marek, L. a kol. (2007). Statistika pro ekonomy. Praha: Professional Publishing.

Marek, L. a kol. (2015). Statistika v příkladech (2. vyd.). Praha: Kamil Mařík – Professional Publishing.

Johnson, R. A., Bhattacharyya, G. K. (2019). Statistics: principles and methods. John Wiley & Sons

Literature will be continuously updated with the latest scientific and professional titles.

Syllabus:

Syllabus:

- 1. Introduction to simple linear regression. Least squares method. Model assumptions.
- 2. Overall significance of a regression. Statistical inference for parameters of regression model.
- 3. Prediction. Confidence interval for an individual prediction and confidence interval for the expected value (mean) of the dependent variable.
- 4. Correlation analysis. Pearson correlation coefficient and coefficient of determination (including statistical inference).
- 5. Assumptions of the classical linear regression model. Graphical analysis of residuals. Nonlinear models that are intrinsically linear. Choice of regression model.
- 6. Analysis of contingency tables. Chi-square test of independence.
- 7. Introduction to time series analysis. Elementary characteristics. Components of time series.
- 8. Regression models for time trends. Forecasting. Forecast accuracy measures.
- 9. Moving averages. Time series decomposition.
- 10. Regression approaches to the seasonal component of time series.
- 11. Simple index numbers.
- 12. Aggregate index numbers.
- 13. Summary.

Language whose command is required to complete the course:

Slovak

Notes:

Assessment of courses

Total number of evaluated students: 370

A	В	С	D	Е	FX
10.54	13.78	19.46	20.27	29.46	6.49

Lecturer: Ing. Ján Bolgáč, Mgr. Eva Fekiačová, Ing. Ľubica Hurbánková, PhD., Ing. Silvia Komara, PhD., Ing. Martina Košíková, PhD., RNDr. Eva Kotlebová, PhD., Ing. Jana Kútiková, doc. RNDr. Viera Labudová, PhD., Ing. Patrik Mihalech, doc. Ing. Ľubica Sipková, PhD., RNDr. Daniela Sivašová, PhD., Ing. Romana Šipoldová, prof. Mgr. Erik Šoltés, PhD., doc. Ing. Mária Voitková, PhD.

Date of the latest change: 07.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI | **Title of course:** Web and Mobile Applications I

FHI/IIA21260/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 2 **Per course:** 0 / 26

Method of study: present

Number of credits: 3

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Requirements to complete the course:

Continuous problem solving during exercises 20%, for the exam 51% of this obligation is required Final assignment 20%, 51% of this obligation is required for the exam. The final task verifies the level of learning outcomes achieved D., E., F., G.

Final exam - written form, 60% (passing the exam means obtaining a minimum of 51% of the exam grade) The theoretical part verifies the achieved level of learning outcomes A., B., C.

Student workload:

Total study load (in hours):

3 credits x 26 hours= 78 hours

Study load distribution:

Seminar participation: 26 hours Preparation for seminars: 13 hours Project preparation: 13 hours

Preparation for the final exam: 26 hours

Teaching results:

- A. Knowledge of web design, web application using HTML markup language and XHTML style language CSS while becoming familiar with techniques used in professional programming practice such as XML, JSON, JavaScript, AJAX programming techniques, and JSON data interchange format
- B. About the meaning and advantages of using XML files as an exchange data format in REST interfaces between web applications, the effectiveness of using the JSON text-data format, and the knowledge with which they will master working with these formats using scripts created in the JavaScript language.
- C. About Typescript (Javascript super-set)
- D. To design the input and output data of a proposed web application in the correct structure and format (in XML and JSON format),
- E. Process the input data in the proposed web application using scripts created in JavaScript language,
- F. How to use Typescript language for automated testing of web applications.

G. Create and test node.js/express based REST services - Interact with SQL and NOSQL database in Typescript - Test the correct functioning of html5 application in a crossbrowser environment

Indicative content:

- 1. markup languages HTML and XHTML
- 2. XML
- 3. the JavaScript scripting language
- 4. AJAX programming technique
- 5. text-data format JSON
- 6. CSS style sheet
- 7. scripting language PHP
- 8. DB management using PHP
- 9. Typescript language
- 10. basic algorithms and data structures
- 11. using/testing REST services node.js / express
- 12. using/testing REST services postgresql and mongodb
- 13. automated application testing with js frameworks

Support literature:

- 1. Mlýnková, I.: XML Technológie. Grada 2008
- 2. Kosek, J.: XML pro každého. Grada 2000
- 3. Jazyk XML. http://w3schools.com/xml/default.asp
- 4. Skriptovací jazyk JavaScript. http://w3schools.com/js/default.asp
- 5. Programovacia technika AJAX. http://w3schools.com/ajax/default.asp
- 6. Textovo-dátový formát JSON. http://w3schools.com/json/default.asp
- 7. Značkovacie jazyky HTML a XHTML. http://w3schools.com/html/default.asp, http://www.w3schools.com/html/html xhtml.asp
- 8. Štýlový jazvk CSS. http://www.w3schools.com/css/default.asp

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 32

A	В	С	D	E	FX
15.63	31.25	9.38	25.0	15.63	3.13

Lecturer: Ing. Mgr. Peter Schmidt, PhD.

Date of the latest change: 01.02.2022

University: University of Economics in Bratislava

Faculty: Faculty of Economic Informatics

Course code: KAI **Title of course:** Web and Mobile Applications II

FHI/IIA21270/21

Type, load and method of teaching activities:

Form of course: Lecture / Practical

Recommended load of course (number of lessons):

Per week: 0 / 4 **Per course:** 0 / 52

Method of study: present

Number of credits: 4

Recommended semester/trimester of study:

Degree of study: I.

Prerequisites:

Requirements to complete the course:

Requirements to complete the course:

Continuous problem solving during exercises 20%, for the exam 51% of this obligation is required Final assignment 20%, 51% of this obligation is required for the exam. The final task verifies the level of learning outcomes achieved F., G., H., I., J.

Final exam - written form, 60% (passing the exam means obtaining a minimum of 51% of the exam grade) The theoretical part verifies the achieved level of learning outcomes A., B., C., D., E.,

Student workload:

Total study load (in hours):

4 credits x 26 hours= 104 hours

Study load distribution:

Seminar participation: 26 hours Preparation for seminars: 26 hours Project preparation: 26 hours

Preparation for the final exam: 26 hours

Teaching results:

After studying this course, students gain the knowledge and should be able to:

- A. the use of modern Javascript frameworks used to create Single Page Applications (SPA) currently in practice.
- B. deepening knowledge of HTML5/CSS3/JS with the ability to create responsive web applications using the Bootstrap library.
- C. creating web applications using Google's Angular4 framework.
- D. to create the client side of a web application connected to prebuilt REST services.
- E. the basics of automated testing based on Karma/Jasmine.
- F. Design a responsive frontend for a web application using Bootstrap
- G. Use the Angular CLI to create the skeleton of an Angular application
- H. Prepare the client side of the web application based on Angular 4
- I. Connect the frontend to REST services on the backend
- J. Test the correct functioning of the application in a crossbrowser environment (Chrome, Firefox) using Karma/Jasmine testing tools

Indicative content:

- 1. HTML5 markup languages
- 2. XML language
- 3. scripting frameworks for Single Page Applications
- 4. advanced javascript capabilities
- 5. AJAX programming technique
- 6. use of the Bootstrap library
- 7. CSS3 styling language
- 8. Typescript language
- 9. advanced algorithms and data structures
- 10. using/testing REST services Angular CLI
- 11. using/testing REST services Angular 4
- 12. automated application testing with js frameworks
- 13. testing Karma/Jasmine

Support literature:

- 1. Mlýnková, I.: XML Technológie. Grada 2008
- 2. Kosek, J.: XML pro každého. Grada 2000
- 3. Jazyk XML. http://w3schools.com/xml/default.asp
- 4. Skriptovací jazvk JavaScript. http://w3schools.com/js/default.asp
- 5. Programovacia technika AJAX. http://w3schools.com/ajax/default.asp
- 6. Textovo-dátový formát JSON. http://w3schools.com/json/default.asp
- 7. Značkovacie jazyky HTML a XHTML. http://w3schools.com/html/default.asp, http://www.w3schools.com/html/html xhtml.asp
- 8. Štýlový jazyk CSS. http://www.w3schools.com/css/default.asp
- 9. Murray N. et all. 2017. ng-book The Complete Book on Angular 4
- 10. Basarat A. Syed: TypeScript Deep Dive (https://basarat.gitbooks.io/typescript/content/docs/getting-started.html)
- 11. Documentation Typecsript (http://www.typescriptlang.org/docs/home.html)
- 12. Douglas Crockford: JavaScript: The Good Parts Vhodná: Explore Angular Resources (https://angular.io/resources)
- 13. HTML and CSS: Design and Build Websites by Jon Duckett (ISBN: 978-1-118-87164-5)

Syllabus:

Language whose command is required to complete the course: slovak

Notes:

Assessment of courses

Total number of evaluated students: 1

A	В	С	D	E	FX
0.0	100.0	0.0	0.0	0.0	0.0

Lecturer: Ing. Mgr. Peter Schmidt, PhD.

Date of the latest change: 01.02.2022

Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Andrea Furková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Dr. Ing. Miroslav Hudec, Person responsible for the delivery, development and quality of the study programme doc. Ing. Martin Mišút, CSc., Person responsible for the delivery, development and quality of the study programme prof. Ing. Ivan Brezina,

CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Jaroslav Kultan, PhD.