

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
National Aviation University
Educational and Research Institute of Humanities
Foreign Languages for Specific Purposes Department

APPROVED
Acting Rector

« ____ » _____ 2017



Quality Management System

SYLLABUS
on
"FOREIGN LANGUAGE"

Field of study: 12 "Information Technologies"
Speciality: 123 "Computer Engineering"
Specialization: "Computer Systems and Networks"
"System Programming"


Year of Study – 1st

Semester - 1st, 2nd

Classroom Sessions – 68
Self-study – 52
Total (hours/ECTS credits – 120/4

Graded Test – 1st semester
Examination – 2nd semester

Index CB–4–123/16–1.4

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The Syllabus on "Foreign Language" is based on the educational and professional program and Bachelor Curriculum № CB-4-123/16 for Speciality 123 "Computer Engineering", Specialization "Computer Systems and Networks", "System Programming" and correspondent normative documents.

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1. EXPLANATORY NOTE

The Syllabus of the discipline "Foreign Language" is developed on the basis of "Methodical instructions for the development and execution of syllabus and course training program of disciplines", put in action by the order of 16.06.2015. №37 / pp.

This academic discipline constitutes the practical basis for forming fluent language skills of students, which will result in their improved professional qualification. Practical skills in the foreign language enable students to be aware of world standards and new technologies, to translate computer manuals, software documentation, and additional literature with the aim of professional decisions-making.

The discipline "Foreign language" to students majoring in "Computer Engineering" (123) aims at their obtaining practical skills in using the foreign language at a professional level, which is necessary in the execution of their professional duties.

The tasks of learning the discipline "Foreign language" are improvement and further development of students' knowledge, habits and skills in different kinds of linguistic activities obtained at school. Mastering the foreign language involves: students' knowledge of both professional and everyday English, their ability to read and make oral/written translation of original scientific and technical texts on specialty, ability to understand recorded and live foreign speech, ability to communicate and make presentations on a professional as well as on a socio-political subject within the topics defined by this syllabus.

As a result of mastering the discipline a student must

know:


- basic professional terminology on the disciplines defined by the academic curriculum;
- main grammar and lexical features of technical translation;
- main rules of handling scientific and technical literature;
- basic socio-political terminology;
- term-building morphemes and models;
- main grammar structures, correlation of forms and meanings.

be able to:

- listening comprehension of monologue and dialogue speech;
- reports on profession-oriented and socio-political topics;
- participation in discussions;
- rendering information obtained from foreign and native language sources (in oral and written forms);
- recognizing grammar structures, correlating their forms and meanings in reading and translating texts .

The subject matter of the discipline is structured modularly and consists of two training modules, namely:

- educational **module №1 "Fundamentals of Computer Science: Electric Current, Electronic Circuits, Binary Number System. Computer Software:**

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Applications Software: Programming Languages, System Software, Operating Systems, Program Translators"

- educational **module № 2 "Computer Hardware and Architecture. Computer Networks"**, each of which is a logically complete, relatively independent, integral part of the academic discipline, the mastering of which involves modular control work and analysis of the results of its implementation.

The academic discipline "Foreign Language" is based on the knowledge of such disciplines as "**Higher** Mathematics", "Physics", "Algorithms and Computational Methods", "Programming", "Discrete Mathematics" and "**Computer Logics**".

2. SUBJECT CONTENT

2.1. Module №1 "Fundamentals of Computer Science: Electric Current, Electronic Circuits, Binary Number System. Computer Software: Applications Software: Programming Languages, System Software, Operating Systems, Program Translators".

Topic 2.1.1. Basic Terminology on the Topic “Fundamentals of Computer Science” Introduced in the Form of a Conversation. Generalization of the grammar: “The structure of an English Sentence. The verb to be”.

Topic 2.1.2. Consolidation of the Terminology by Translating Texts. Listening to a text on fundamentals of computer science with Further Discussion of the Material Heard. Grammar Review: “The structure of an English Sentence. Word-building”.

Topic 2.1.3. Basic Terminology on the Topic “The History of Computer Science” Introduced in the Form of a Conversation. Reading and discussing a text on the history of computer science. Reading and translating socio-political texts (“Mass Media”). Word-building.

Topic 2.1.4. Reading and discussing a text on famous scientists in the history of computer science. Making Up Dialogues on the Topic. Grammar: “Present Indefinite Active”.

Topic 2.1.5. Basic Terminology on the Topic “Electric Current” Introduced in the Form of a Conversation. Grammar: “The structure there is/are. Interrogative Sentences”.

Topic 2.1.6. Translating a text on the properties and types of electric current and analyzing the tenses of the verbs in it. Making questions to the text and composing a text retelling plan. Grammar: Present/Past Participle.

Topic 2.1.7. Basic Terminology on the Topic “Electronic Circuits” Introduced in the Form of a Conversation. Listening to a text on integrated circuits with Further Discussion of the Material Heard. Grammar: “Present Indefinite Active/Passive”.

Topic 2.1.8. Making Up Dialogues on electronic circuits. Discussing the latest world events. Grammar Review: “Present Indefinite Active/Passive”.

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Topic 2.1.9. Basic Terminology on the Topic “Binary Number System” Introduced in the Form of a Conversation. Translating socio-political texts (“Visits”). Grammar: “Past Indefinite Active /Passive”.

Topic 2.1.10. Consolidation of the Terminology by Translating Texts on Binary Number System. Grammar Review: “Past Indefinite Active /Passive”.

Topic 2.1.11. Basic Terminology on the Topic “Computer Software” Introduced in the Form of a Conversation. Translating texts containing passive structures. Grammar: “Future Indefinite Active /Passive”.

Topic 2.1.12. Listening to a text on computer software with Further Discussion of the Material Heard. Grammar Activation: “Future Indefinite Active /Passive”.

Topic 2.1.13. Basic Terminology on the Topic “Applications Software” Introduced in the Form of a Conversation. Making different types of questions to texts on programming languages. Discussing the texts read.

Topic 2.1.14. Discussing presentations on application software and application packages. Making Up Dialogues on the Topic. Grammar Consolidation: “Future Indefinite Active /Passive”.

Topic 2.1.15. Basic Terminology on the Topic “Word Processors” Introduced in the Form of a Conversation. Translating a text on word processors. Discussing the latest art and culture events.

Topic 2.1.16. Making Up Dialogues on word processors. Discussing the latest world events. Consolidation of the Terminology and Grammar.

Topic 2.1.17. Basic Terminology on the Topic “Database Management Software” Introduced in the Form of a Conversation. Grammar: “Present Continuous Active /Passive”.

Topic 2.1.18. Consolidation of the Terminology by Translating Texts. Making questions to the text and composing a text retelling plan. Grammar Review: “Present Continuous Active /Passive”.


Topic 2.1.19. Basic Terminology on the Topic “Virtual Reality Software and Game Software” Introduced in the Form of a Conversation. Translating a text on virtual reality software and game software. Making questions to the text and composing a text retelling plan. Grammar: “Past Continuous Active/Passive”.

Topic 2.1.20. Listening to a text on application software with Further Discussion of the Material Heard. Grammar Review: “Past Continuous Active/Passive”.

Topic 2.1.21. Basic Terminology on the Topic “Computer Graphics Software” Introduced in the Form of a Conversation. Translating a text on Computer Graphics Software and analyzing the tenses of the verbs in it. Grammar: “Future Continuous Active”.

Topic 2.1.22. Discussing presentations on properties and application graphics software. Grammar Review: “Future Continuous Active”.

Topic 2.1.23. Basic Terminology on the Topic “Programming Languages” Introduced in the Form of a Conversation. Translating a text on programming

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languages. Making questions to the text and composing a text retelling plan. Grammar Consolidation: “Future Continuous Active”.

Topic 2.1.24. Making Up Dialogues on programming languages.. Discussing the latest world events. Comparative analysis of Indefinite and Continuous Tenses.

Topic 2.1.25. Basic Terminology on the Topic “Classification of Programming Languages” Introduced in the Form of a Conversation. Translating a text on classification of programming languages. Making different types of questions to texts and composing a text retelling plan.

Topic 2.1.26. Listening with Further Discussion of the Material Heard. Consolidation of the Terminology by Translating Texts. Indefinite and Continuous Tenses (Revision).

Topic 2.1.27. Basic Terminology on the Topic “System Software” Introduced in the Form of a Conversation. Translating texts on System Software and analyzing the tenses of the verbs in them. Discussing the latest world events.

Topic 2.1.28. Discussing home reading texts. Consolidation of the Terminology by Translating Texts. Grammar activation.

Topic 2.1.29. Basic Terminology on the Topic “Operating Systems” Introduced in the Form of a Conversation. Translating a text on characteristics of operating systems. Making questions to the text and composing a text retelling plan. Grammar Review.

Topic 2.1.30. Making Up Dialogues on operating systems.. Consolidation of the Terminology by Translating Texts. Comparative analysis of Indefinite and Continuous Tenses.

Topic 2.1.31. Basic Terminology on the Topic “Program Translators” Introduced in the Form of a Conversation. Translating texts on Program Translators and analyzing the tenses of the verbs in them. Grammar Review: "Indefinite and Continuous Tenses".


Topic 2.1.32. Presenting Reports on Program Translators. Consolidation of the Terminology and Grammar.

2.2. Module №2 "Computer Hardware and Architecture. Computer Networks".

Topic 2.2.1. Basic Terminology on the Topic “Computer Hardware” Introduced in the Form of a Conversation. Indefinite and Continuous Tenses (Revision).

Topic 2.2.2. Consolidation of the vocabulary by Translating and discussing special Texts. Translating texts on computer hardware. Grammar: “Present Perfect Active/Passive”.

Topic 2.2.3. Basic Terminology on the Topic “Computer Memory Types” Introduced in the Form of a Conversation. Translating a text on computer memory types. Making questions to the text and composing a text retelling plan. Grammar Review: “Present Perfect Active/Passive”.

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Topic 2.2.4. Speaking on “Computer Hardware”. Socio-political vocabulary (“Agreements”). Fixing the grammar: “Present Perfect Active/Passive”.

Topic 2.2.5. Basic Terminology on the Topic “The functions of a central processing unit ” Introduced in the Form of a Conversation. Translating a text on the functions of a central processing unit and analyzing the tenses of the verbs in it. Grammar: “Past Perfect Active/Passive”.

Topic 2.2.6. Listening to a text on the functions of a central processing unit. with Further Discussion of the Material Heard. Discussing socio-political articles. Grammar: “Past Perfect Active/Passive”.

Topic 2.2.7. Basic Terminology on the Topic “Input/output devices” Introduced in the Form of a Conversation. Translating texts on Input/output devices. Grammar: “Future Perfect Active/Passive”.

Topic 2.2.8. Consolidation of the vocabulary by discussing special texts. Discussing the latest news in the world. Fixing the grammar: “Future Perfect Active/Passive”.

Topic 2.2.9. Basic Terminology on the Topic “Communications networks” Introduced in the Form of a Conversation. Translating a text on Communications networks. Grammar Review: “ Present Perfect Continuous”.

Topic 2.2.10. Discussing presentations on “ Communications networks”. Composing dialogues on the topic. Fixing the grammar: “ Present Perfect Continuous”.

Topic 2.2.11. Basic Terminology on the Topic “Computer Architecture” Introduced in the Form of a Conversation. Translating texts on Computer Architecture and analyzing the tenses of the verbs as well as the functions of the verbs to be and to have in them.

Topic 2.2.12. Listening to texts on Computer Architecture with Further Discussion of the Material Heard. Grammar Consolidation: “Past Perfect Continuous”.


Topic 2.2.13. Basic Terminology on the Topic “Classification of Computer Architecture ” Introduced in the Form of a Conversation. Discussing home reading texts. Grammar: “Future Perfect Continuous”.

Topic 2.2.14. Discussing the students’ papers on Classification of Computer Architecture. Grammar Consolidation: “Future Perfect Continuous”.

Topic 2.2.15. Basic Terminology on the Topic “Computer Architecture and Software Compatibility” Introduced in the Form of a Conversation. Consolidation of the vocabulary by Translating and discussing special Texts. Comparative analysis of the Verb Tenses.

Topic 2.2.16. Making Up Dialogues on Software Compatibility. Grammar Review: “Modal verbs can, may, must”.

Topic 2.2.17. Basic Terminology on the Topic “Criteria of Computer Architecture” Introduced in the Form of a Conversation. Translating a text on Criteria of Computer Architecture. Making questions to the text and composing a text retelling plan. Grammar Review “Modal verbs can, may, must”.

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Topic 2.2.18. Listening to texts on Computer Architecture with Further Discussion of the Material Heard. Reading and translating socio-political texts (“Elections”). Comparative analysis of the Verb Tenses.

Topic 2.2.19. Basic Terminology on the Topic “Computer Networks” Introduced in the Form of a Conversation. Consolidation of the vocabulary by Translating and discussing special Texts on modern computer networks. Grammar: “Modal verbs have (to), be (to)”.

Topic 2.2.20. Translating and discussing special Texts on using computer networks. Composing key questions to texts. Grammar: Grammar activation: “Modal verbs have (to), be (to)”.

Topic 2.2.21. Basic Terminology on the Topic “Types of Computer Networks” Introduced in the Form of a Conversation. Translating a text on Types of Computer Networks. Making questions to the text and composing a text retelling plan. Grammar: “Modal verbs should, ought to”.

Topic 2.2.22. Consolidation of the vocabulary by Translating and discussing special Texts on Types of Computer Networks. Review of the Verb Tenses.

Topic 2.2.23. Basic Terminology on the Topic “Network configurations” Introduced in the Form of a Conversation. Discussing home reading texts on peculiarities of Network configurations.

Topic 2.2.24. Making Up Dialogues on using computer networks. Grammar Consolidation: “Modal verbs should, ought to, will”.

Topic 2.2.25. Basic Terminology on the Topic “The history of the Internet” Introduced in the Form of a Conversation. Discussing the students’ presentations on The history of the Internet. Comparative analysis of the modal verbs.

Topic 2.2.26. Listening to texts on advantages and disadvantages of using the Internet with Further Discussion of the Material Heard. Grammar activation “Modal verbs should, ought to, will ”.

Topic 2.2.27. Basic Terminology on the Topic “Functions of the Internet” Introduced in the Form of a Conversation. Translating a text on Functions of the Internet. Making key questions to the text and composing a text retelling plan.


Topic 2.2.28. Discussing home reading texts. Discussing the latest events in the field of information technologies.

Topic 2.2.29. Basic Terminology on the Topic “Search engines” Introduced in the Form of a Conversation. Making Up Dialogues on Search engines. Grammar Review “Modal verbs”.

Topic 2.2.30. Consolidation of the Terminology by Discussing the students’ papers on search engines.

Topic 2.2.31. Basic Terminology on the Topic “The Structure of WANs and LANs” Introduced in the Form of a Conversation. Translating special texts on The Structure of WANs and LANs. Socio-political vocabulary activation and discussing the latest events.

Topic 2.2.32. Discussing the students’ presentations on “The application of WANs and LANs”. Comparative analysis of the modal verbs.

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3. LIST OF REFERENCES

3.1. Basic literature

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- 3.1.3. Акмалдінова О.М., Виноградова І.В. Hardware Essentials. Навчальний посібник, ч.1. К.: НАУ, 2002, - 124с.
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- 3.1.7. Мислива Т.А., Теремінко Л.Г. Basics of Software Engineering. Практикум для студентів напряму 6.050103 "Програмна інженерія". К.: НВФ "Славутич-Дельфін", 2010, - 128с.
- 3.1.8. Santiago Rimacha Esteras Professional English. Infotech. English for computer users. Cambridge University Press, 2008, - 168с.

3.2. Additional literature

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- 3.2.2. Акмалдінова О.М., Фатєєва С.П. English Grammar Practise. Навчальний посібник. К.: НАУ, 2002, - 148с.
- 3.2.3. Бугайов О.Є., Бабій Г.В., Волгіна С.А. Computer Networks. Практикум для студентів інституту комп'ютерних технологій. К.: НАУ, 2009, - 40с.
- 3.2.4. Верба Г.В., Верба Л.Г. Граматика сучасної англійської мови. Довідник. К.: "Логос", 2000, - 352с.
- 3.2.5. Газетні статті з суспільно-політичної тематики.
- 3.2.6. Журнальні статті з періодичних фахових видань "Better Software", "Computerworld".
- 3.2.7. Степанковська Л.М. Методичні вказівки і завдання з теми "Personal Computer" для студентів I курсу факультету інформатики. К.: НАУ, 2002, - 56с.
- 3.2.8. Словники за фахом.

(Ф 03.02 – 04)

АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

| № пор. | Прізвище ім'я по-батькові | Дата ревізії | Підпис | Висновок щодо адекватності |
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АРКУШ ОБЛІКУ ЗМІН

| № зміни | № листа (сторінки) | | | | Підпис особи, яка внесла | Дата внесення зміни | Дата введення зміни |
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УЗГОДЖЕННЯ ЗМІН

| | Підпис | Ініціали, прізвище | Посада | Дата |
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