МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

Національний авіаційний університет

Факультет аеронавігації, електроніки та телекомунікацій

Кафедра авіаційної англійської мови

УЗГОДЖЕНО Декан ФАЕТ

> Сергій ЗАВГОРОДНІЙ 2023 p.

ЗАТВЕРДЖУЮ ₹

Проректор з навчальної роботи



Система менеджменту якості

РОБОЧА ПРОГРАМА

навчальної дисципліни «Авіаційна англійська мова»

Освітньо-професійні програми: Комплекси пілотажно-навігаційного обладнання

Галузь знань:

17 Електроніка та телекомунікації

Спеціальність:

173 Авіоніка

Форма навчання	Ce M.	Усього (год. / кредитів ECTS)	лк Ц	ПР.3	Л.3	CPC	Д3 / РГР / К.р	КР / КП	Форма сем. контролю
Денна	8	120/4		60	-	60		320	8-диф.залік
Заочна	8-9	120/4		12		108	к.д.р.9		9- диф.залік

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СМЯ НАУ РП 22.01.04-01-2023



Система менеджменту якості. Робоча програма навчальної дисципліни «Авіаційна англійська мова»

Шифр документа СМЯ НАУ РП 22.01.04-01-2023

Стор. 2 із 12

Робочу програму навчальної дисципліни «Авіаційна англійська мова» розроблено на осгосвітньо-професійних програм «Комплекси пілотажно-навігаційного обладнання», навчаль та робочих навчальних планів № НБ-2-173-1/22; РБ-2-173-1/22; та № НБ-2-173-1з/22; РБ-2-1 1з/22 підготовки здобувачів вищої освіти освітнього ступеня «Бакалавр» за спеціальнік 173 «Авіоніка» та відповідних нормативних документів.

Робочу програму розробила доцент, кан.пед.наук	Людмила НЕМЛІЇ
Робочу програму обговорено та схвалено на засідан протокол № <u>від « 5 » _ 09 _</u> 2022 р.	ні кафедри авіаційної англійської мо
Завідувач кафедри — Эту!	Наталія ПАЗЮРА
Робочу програму обговорено та схвалено на за професійних програм «Комплекси пілотажно-навіга «Авіоніка» – кафедри авіоніки протокол № 17 від «	ційного обладнання», спеціальності 1
Гарант ОПП «Комплекси пілотажно-навігаційного обладнання»	Олександр ЧУЖ.
Завідувач кафедри	- Dpici PPHUGEI
Робочу програму обговорено та схвалено на засіда факультету асронавігації, електроніки та телекомуніка « 14» 10-2022 р.	
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INTRODUCTION

Course Training Program on «Aviation English» is developed based on the "Methodical guidance for the subject course training program", approved by the order № 249/од, of 29.04.2021 and corresponding normative documents.

1. EXPLANATORY NOTES

1.1. Place, objectives, tasks of the subject

The subject "Aviation English" is the theoretical and practical basis of the set of knowledge and skills that form the profile of a specialist in the fields of Electronics and telecommunications (Speciality «Avionics»).

The purpose of teaching the subject is to acquire foreign language communication skills in a separate field of *professional activity*; to improve verbal communication and problem-solving skills; to study the specialized aviation terminology; to get acquainted with the latest achievements of science and technology in the field of Electronics and telecommunications.

The tasks of the subject:

- preparing students for effective communication in their academic and professional environment;
- formation of communicative language competencies in real situations of academic and professional activity of future technical specialists;
 - achieving the proficiency at the B1 level, which is the standard for obtaining a bachelor's degree.

1.2. Learning outcomes the subject makes it possible to achieve:

As a result of studying this subject, the student must acquire the following learning outcomes (in complex with other educational components):

- be able to think critically the main theories, principles and methods in the professional activity;
- communicate freely any professional issues in official and foreign languages orally and in writing;
- be able to learn new knowledge, advanced technologies and innovations, find new non-standard solutions and means of their implementation in the process of communication with colleagues.

1.3. Competences the subject makes it possible to acquire:

As a result of studying this subject, the student must acquire the following competencies (in particular, in combination with other educational components):

- ability to communicate in a foreign language;
- ability to learn and master modern knowledge;
- ability to search, process and analyze information from various sources;
- knowledge and understanding of the subject area and understanding of professional activity;
- ability to search, process and analyze information from various sources and ability to work in a team.

1.4. Interdisciplinary Connections

This subject is based on knowledge of such subjects as "Higher Mathematics", "Physics", "Aircraft Control Systems", "Aviation Base" and is the basis for the study of further subjects, namely: "Electrical and Technical Avionics base", "Theory of Automatical Control" etc.



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2. COURSE TRAINING PROGRAM ON THE SUBJECT

2.1. The subject content

Training material is structured according to the module principle and consists of **two** educational modules:

Module № 1 "Airport. Aircraft maintenance. Engines".

Module № 2 "Aircraft auxiliary systems", which are logically complete, relatively independent, holistic part of the subject, learning of which provides module test and analysis of its performance.

2.2. Modular structuring and integrated requirements for each module

Module №1 "Airport. Aircraft maintenance. Engines".

Integrated requirements to the module №1:

(know the terminology of the specialty, be able to use basic grammatical constructions in speech and in writing, have the ability to communicate in a foreign language on the topics of the module)

- **Topic 1. Airport.** Airport structure. Passenger services. Airport markings and airport service transport. Reading the text by topic, discussing the reading. Listening to audio material onthe topic.
- **Topic 2. Pre-flight preparation of the aircraft**. Weather conditions in the airport area. The influence of weather conditions on the work of airport technical services. Fixing problems related to weather conditions. Reading the text by topic, discussing the reading. Listening to audio material on the topic.
- **Topic 3. Types of aircraft engines**. Piston engines. Types of aircraft engines. Jet engines. Types of aircraft engines. Gas turbine and turbojet engines. Types of aircraft engines. Turbofan and turbine engines. Reading the text by topic, discussing the reading. Listening to audio materialon the topic.
- **Topic 4. Maintenance of engines**. Diagnostics. Engine maintenance. Repair. Reading the text by topic, discussing the reading. Listening to audio material on the topic.
- **Topic 5. Aircraft maintenance**. Pre-flight maintenance. Review after the flight. Maintenance of flight control systems. Reading the text by topic, discussing the reading. Listening to audio material on the topic.

Module №2 "Aircraft auxiliary systems".

Integrated requirements of the module №2: (know the terminology of the specialty, be able to use basic grammatical constructions in speech and in writing, have the ability to communicate in a foreign language on the topics of the module)

- **Topic 1**. **Aircraft auxiliary systems**. Engine lubrication system. Service. Fuel system. Maintenance of the fuel system. Reading the text by topic, discussing the reading. Listening to audio material on the topic.
 - **Topic 2. Fire protection system.** Maintenance of the fire protection system.



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Topic 3. Power supply system. Maintenance of the power supply system. Reading the text by topic, discussing the reading. Listening to audio material on the topic.

Topic 4. Air condensation system. Maintenance of the air condensation system. Anti-icing system. Service. Reading the text by topic, discussing the reading. Listening to audio material on the topic.

Topic 5. Hydraulic system. Hydraulic system maintenance. Flight navigation systems. Maintenance of navigation systems. Constant expressions on the topic "Problem Solving". Reading the text by topic, discussing the reading. Listening to audio material on the topic.

2.3. Training schedule of the subject

		Total, ho	ır	
			study: Fu	ll-time
No	Theme	education	1	
	(thematic section)	l ota <mark>l</mark>	practical	elf-study
1	2	3	4	5
	Module №1 Airport. Aircraft maintenance. I	Engines		
1 1	Airport. Airport structure	8	semester	
1.1		4	2	2
1.2	Pre-flight preparation of the aircraft	4	2	2
1.3	Weather conditions in the airport area	4	2	2
1.4	The influence of weather conditions on the work of airport technical services	4	2	2
1.5	Fixing problems related to weather conditions.	4	2	2
1.6	Types of aircraft engines. Piston engines	4	2	2
1.7	Types of aircraft engines. Jet engines. Gas turbine and turbojet engines	4	2	2
1.8	Types of aircraft engines. Turbofan and turbine engines	4	2	2
1.9	Maintenance of engines. Diagnostics.	4	2	2
1.10	Engine maintenance. Repair	4	2	2
1.11	Aircraft maintenance	4	2	2
1.12	Pre-flight maintenance	4	2	2
1.13	Review after the flight	4	2	2



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1.14	Maintenance of flight control systems	4	2	2
1.15	Module test №1	4	2	2
Total	by the module №1	60	30	30
	Module №2 Aircraft auxiliary systems	5		
2.1.	Aircraft auxiliary systems	4	2	2
2.2	Engine lubrication system	4	2	2
2.3	Fuel system	4	2	2
2.4	Maintenance of the fuel system	4	2	2
2.5	Fire protection system	4	2	2
2.6	Maintenance of the fire protection system	4	2	2
2.7	Power supply system	4	2	2
2.8	Maintenance of the power supply system	4	2	2
2.9	Air condensation system	4	2	2
2.10	Maintenance of the air condensation system. Anti-icing system. Service	4	2	2
2.11	Hydraulic system	4	2	2
2.12	Hydraulic system maintenance	4	2	2
2.13	Flight navigation systems	4	2	2
2.14	Maintenance of navigation systems	4	2	2
2.15	Module test №2	4	2	2
	Total by the module №2	60	30	30
	Total by the subject	120	60	60



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3. BASIC CONSEPTS OF GUIDANCE ON THE SUBJECT

3.1. Teaching methods

It is recommended to use the following teaching methods during mastering the subject:

- explanatory and illustrative method;
- method of problem presentation;
- reproductive method;
- research method.

The implementation of these methods are carried out during lectures, demonstrations, self-study, work with the educational material, analysis and solution of problems.

3.2. List of references

Basic literature

- 3.2.1. <u>Caleb C. Chidebell</u> Fundamentals of Modern Avionics Engineering: Civil Aircraft Electronics Part I– XLIBRIS US. –2022. –204p.
- 3.2.2. Foreign Language (English): Method Guide to self-study for students of speciality 173 "Avionics"/ Compiler: N.S.Zelinska. K.: NAU, 2017. 64 p.
 - 3.2.3. Moir Ian, Seabridge Allan. Military Avionics Systems. Edmunds: Professional Engineering Publishing Ltd, 2019. 396.
 - 3.2.4. Авіоніка. Фахова іноземна мова. Авіація: практикум / уклад. О. С. Банькова. К.: НАУ, 2022. - 44 с.
 - 3.2.5. Авіоніка. Фахова іноземна мова. Технічне обслуговування літака: практикум / уклад. О. С. Банькова. К. : НАУ, 2022. 32 с.

3.3. Additional Literature

- 3.2.6. Англо-український словник авіаційних термінів / Уклад.: Р.О. Гільченко. Фастів: КуПол, 2009. 280 с.
 - 3.2.7. Dictionaries by profession.

3.3. Internet Information resource

3.3.1. Educational Professional Program of the subject "Aviation English"



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4. RATING SYSTEM OF KNOWLEDGE AND SKILLS ASSESSMENT

4.1. Assessment of certain kinds of student academic work is carried out in accordance with table 4.1. and 4.1.1

Table 4.1. (exam)

	Maximum Grade Values					
Kind of Academic Work	Full-time					
№ 8 semester						
Module № 1-2						
Reading and analysis of professionally oriented texts	5/5					
Listening to the professionally oriented texts	5/5					
Writing information related to the topic	5/5					
Monologue speaking based on the topic	5/5					
Dialogic speaking based on the topic	5/5					
Preparation of a report on a topic// Test (homework)	10/10					
For admission to complete module test №1-2, a student must receive not less than	21/21					
Carrying out Module Test №1-2	15/15					
Total by module №1-2	50/50					
Semester Grade	100					
Total by the subject	100					

The credit rating is determined (in points and on a national scale) based on the results of all types of educational work during the semester.

- 4.2. Completed types of educational work are credited to the student, if he received a positive rating for them (Appendix 1).
- 4.3. The sum of rating assessments received by the student for certain types of completed academic work is the current modular rating assessment, which is recorded in the module control.
- 4.4. The sum of the final semester modular and examination ratings, in points, is the final semester rating, which is converted into grades on the national scale and the ECTS scale (Annex 4).

In the case of differentiated credit, the final semester rating is converted into a grade on the national scale and the ECTS scale (Appendix 2).

- 4.5. The final semester rating in points, on the national scale and the ECTS scale is entered in the test report, study card and student record book, for example, as follows: 92 / Excellent / A, 87 / Good / B, 79 / Good / C, 68 / Set / D, 65 / Set / E, etc. (Appendix 2).
- 4.6. The final rating of the subject is equal to the final semester rating. The specified final rating assessment in the subject is entered in the Diploma Supplemen



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(Ф 03.02 - 01)

АРКУШ ПОШИРЕННЯ ДОКУМЕНТА

№ прим.	Куди передано (підрозділ)	Дата видачі	П.І.Б. отримувача	Підпис отримувача	Примітки

(Ф 03.02 - 02)

АРКУШ ОЗНАЙОМЛЕННЯ З ДОКУМЕНТОМ

	АРКУШ ОЗНАИОМЛЕННЯ З ДОКУМЕНТОМ № Підпис Дата						
№ пор.	Прізвище ім'я по-батькові	Підпис ознайомленої особи	Дата ознайом- лення	Примітки			



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(Ф 03.02 - 04)

АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

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

 $(\Phi 03.02 - 03)$

АРКУШ ОБЛІКУ ЗМІН

№ зміни	№ листа (сторінки)			Підпис	Дата	Дата	
	Зміненого	Заміненого	Нового	Анульо- ваного	особи, яка внесла зміну	внесення зміни	введення зміни

(Ф 03.02 - 32)

УЗГОДЖЕННЯ ЗМІН

	Підпис	Ініціали, прізвище	Посада	Дата
Розробник				
Узгоджено				