APPROVED BY
Chair of the Faculty Academic Council
B.G.Dzoldasbekova
Signature
Date of meeting
№ 8
on « 08 » 02 2024 year

Map of SPOC integration in the educational process in the discipline

IY (p) 5202-Foreign language (professional)

Aim – to integrate SPOC or its elements into the educational process in the discipline

Part 1. Selection of SPOC based on comparison of general characteristics with the discipline

Name of the discipline: Foreign language (professional)	**SPOC name:**
Code and classification of the field of education **7M01504-Biology**	English for Master's Degree Students in Biology
Code and classification of the direction of education **7M05109-Biotechnology**	
Code and group of educational programs **7M05102-Biomedicine**	
Code of the educational program **7M05113-Genetics**	
Name of the educational program **7M05105-Neuroscience**	
Labor intensity (hours / credits)	**Labor intensity (hours / credits)**
45/5	**30 hours**
Educational stage	**Educational stage recommendations (if applicable)**
Master's degree	This small private online course (SPOC) for master students in Biology includes the development of all four language skills: listening,reading, speaking and writing. Each topic of this SPOC is associated with theprofessional and scientific direction of the master's students in the specialty.
Form of study (full-time/blended learning/short-time)	**Platform**
Full-time	SDL Moodle (dl.kaznu.kz)
	Course URL
	https//dl.kaznu.kz/course/view.php?id=139602

Type of discipline in Study Plan (core/major/elective)	Educational organization-developer
Core	Al-Farabi Kazakh Nationl University, Almaty, Kazakhstan
Language of education	Language of education
English	English
Term	Availability: (announced date/ beginning of the term/ On Demand/ monthly start up of the group).
	beginning of the term (2)
Form of assessment (exam) Written examination (traditional)	Control test in form of *peer to peer evaluation, test, project* etc. Essay writing

Part 2. Selection of SPOC based on the analysis of the content and forming competencies

2.1. Learning outcomes (LO) of the discipline (3-6 basic):	Learning outcomes of the MOOC (if declared):
At the end of this discipline master students: LO1 -to understand an authentic speech of a general, professional and scientific nature by ear; -to build meanings into a single content of the video text, statements in relation to its functional orientation; to understand and correctly interpret speech in scientific discourse.	At the end of this SPOC master students: 1.1 to perceive the content of the listened text 1.2 to extract the necessary information from the listened text.
LO2 -to apply professional vocabulary and terminology necessary for effective communication in a professional environment within the framework of their specialty; to think creatively; to be creative in solving new problems and situations;to prepare and make oral messages on professional topics, including using new technologies independently.	2.1 to use vocabulary to support a conversation on a professional and scientific topic; to make messages and reportson various scientific and professional topics of MIW (via peer review).

LO3-to read and analyze texts on specialty;to extract the necessary information from English-language sources created in various sign systems (text, table, graph, diagram, video, audio-visual series, etc.) in typical situations of professional communication; to recognize significant information in oral and written statements, as well as to use he basic grammatical units characteristic of the scientific style.	
LO4- to compose written texts of an informative nature (message,report, review articles and etc.); - annotation of texts on the profile of the specialty, messages of undergraduates about research topics; to formalize their thoughts in writing correctly and logically	4.1 -to understand the basics of building complex sentences in English in professional writing; to express thoughts in writingusing the necessary lexical and grammatical tools.
LO 5- To prepare a presentation and a project work on the studiedtopics of the online course.	5.1 to create projects and presentations on the studied topics; to protect the presentation,convey ideas to others.
2.2. The degree of compliance of the LO (performed on the basis of expert judgment in %) ***Note. Specify the percentage of MOOC compliance with the discipline. For example, 80%.*** ***If you choose two MOOCS to integrate into the same discipline - for example, MOOC1 – 80%, MOOC2 -60%.***	
2.3. The degree of compliance with the subject (match to more than half/match to 1 module/other) **Note. Briefly comment compliance in a free form.* ** Example of a comment when integrating two SPOCS into one discipline: "the subject areas of the courses are the same. The difference is that MOOC1 offers a broader overview of the theoretical foundations of project management and some economic design tools. SPOC2 on the use of the software. The program of our course (E-course in MOODLE) is aimed at mastering the technology of logicostructural design method.*	

Part 3. Choosing a MOOC integration model:

3.1.The choice of the model: **Model 1. MOOC-support: MOOC is used as an additional part for the discipline in its traditional implementation as a self-student work, with or without the use of the "inverted class" technology.** Master students have the opportunity to speak English with other students and write short answers to some simple discussion questions, listen to people speaking English in different situations, and check your understanding with tests. It is aimed at teaching undergraduates all 4 types of speech activity: Speaking, Listening Comprehension, Reading, Writing and developing these skills.

Model 2. Blended learning «+MOOC": partial replacement of classroom classes (mainly lectures), as well as partial transfer of individual MOOC topics with or without the use of "inverted class" technology. **Model 3. Blended learning "SPOC+": using SPOC with partial retention of lectures, practical and seminars, as well as using the results of study on SPOC for the current certification and final control of the discipline.**
3.2. Formulate your own goal of using MOOC in teaching your subjects
The main goal of studying this SPOC is to master the necessary level of language competence based on the Common EuropeanFramework of Reference for Languages the active usage of a foreign language, both in professional and scientific communication, as well as for further self-education. This online course also includes the development of all four language skills: listening, reading, speaking and writing. Each lesson of this SPOC is associated with the professional and scientific direction of the master's students in the specialty.
3.3. Justification of the choice of the model (in free form, 30-60 words) and its correlation with the goal (p. 3. 2.) ***Please explain your choice of MOOC and its integration model in the form of an essay, explaining which selection criteria you used and what guided your choice.*** *Use the analysis presented in parts 1 and 2.* This SPOC gives master students specific topics and vocabulary in Biology that will help them more easily understand their specialty. In this course, they will also get acquainted with what specific features are important for understanding terms, authentic texts in specialty, making presentations completing independent works and writing different kinds of written assignments. In listening exercises, and while watching videos, they will practise vocabulary of Biology.

Part 4. Plan for the integration of SPOC in teaching discipline (example, one section)

4.1. The name of the model (see 3.1)
Model 3. Blended learning "SPOC+": using SPOC with partial retention of lectures, practical and seminars, as well as using the results of study on SPOC for the current certification and final control of the discipline.

Week	Name of theme	Number of hours	Max scores	Knowledge assessment form	Form of the lesson/platform
Module 1 Science and Engineering					
1	**PL1 Chemical engineering** **Speaking**: Brainstorm: What is your understanding of chemical engineering	3	4	In written form and orally	Clasroom lesson

	My expectations from master degree program. **Listening:** Video quiz: The chemical engineer. **Reading and translation:** Text: Carbon. **SPOC:** Academic Skills for Master's Degree in Biology на платформе dl.kaznu.kz **Lesson1: Introduction to the Course**				Asynchronous on the platform SDL Moodle (dl.kaznu.kz)
1	**HW:** Text translation: Ionic and covalent bonding (Lesson 2, ELSP for maters) **SPOC:** Home assignment: **Video:** Academic English vs General English. https://www.youtube.com/watch?v=c3_VoWd_Ai0&t=418 After watching a video. Practice #4. Answer the questions according to the video. Practice #5. Choose the best option. Practice #6. Paraphrasing		1	In written form and orally	Asynchronous on the platform SDL Moodle (dl.kaznu.kz)
2	**PL2 Nanotechnology** **Speaking**: Brainstorm activity: Nanotechnology in our life. Situation task **Listening**: Lecture on Nanotechnology **Reading and translation:** Text: Buckminsterfulle **SPOC:** Academic Skills for Master's Degree in Biology на платформе dl.kaznu.kz **Lesson 2:** Language Focus: Classifying	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
2	**HW: Text translation:** Electron configuration in the periodic table (Lesson 3, ESLP for masters) **SPOC:** Home assignment: Practice #5. Write an essay about "Classification of animals"		1	In written form and orally	Asynchronous on the platform SDL Moodle (dl.kaznu.kz
3	**PL3 Chemistry and Chemical Engineering degree at foreign universities** **Speaking:** My expectations from master degree **Listening:** Interview with students and lectures of Chemical engineering faculty **Reading and translation:** Text: Nanocrystal. **SPOC:** Academic Skills for Master's Degree in Biology на платформе dl.kaznu.kz **Lesson 3:** Hypothesis	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz

3	**HW: IWM** "How Kazakhstan solves clean water access and sanitation problems? (SDG 6: Clean water and sanitation»)		1	In written form	
3	**IWMT 1 Consultation on the IWS 1 implementation**			Consultation	
3	**IWM 1** «How Kazakhstan solves clean water access and sanitation problems?		20	Making and defending a presentation	
	Module 2				
4	**PL4 Chemistry and chemical engineering:** spheres of my knowledge application **Speaking:** Warming-up activity: Chemical elements and real objects **Listening:** Industries which require chemical knowledge **Reading and translation**: Text: Graphene **SPOC:** Academic Skills for Master's Degree in Biology on the platform dl.kaznu.kz **Lesson 4:** Language Focus: Comparing and Contrasting	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
4	**Text Translation:** Carbon nanotubes (Lesson 5, ELSP for masters) **SPOC:** Home assignment: Writing skill: Writing about similarities and differences. Practice #4. Compare the education in the USA and Kazakhstan		1	In written form and orally	
5	**PL5 Equations and formulas in English** How to read chemical equations and formulas **Listening:** How to write chemical equations **Reading and translation:** Text: Acetone Peroxide. **SPOC:** Academic Skills for Master's Degree in Biology on the platform dl.kaznu.kz **Lesson 5:** Language Focus: Cause and Effect	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
5	**Text translation:** Diamond (Lesson 6, ELSP for masters)		1	In written form	
5	**IWMT 2 Consultation on the IWS 2 implementation "What I like and dislike in my future profession"** **SPOC: MIW #1.** Writing: Compare and Contrast essay. "What causes people not to go to the doctor when they have medical problems"?			In written form and orally	
5	**IWM 3 "What I like and dislike in my future profession"**		20	In written form and orally	

	SPOC: MIW #1. Writing: Compare and Contrast essay. "What causes people not to go to the doctor when they have medical problems"?				
5	**Make a structural and logical diagram of the read material**				
6	**PL6 Peculiarities of Academic Language** **Language peculiarities of scientific chemical language in English** **Writing:** Impersonal constructions **Listening:** Lecture on matter **Reading:** Text: Sodium. **SPOC:** Academic Skills for Master's Degree in Biology on the platform dl.kaznu.kz **Lesson 6:** Language Focus: Cause and Effect (worksheet)	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
6	**HW: Essay:** "What I like and dislike in my future profession"		1	In written form	
7	**PL7 Units of measurement and symbols used in chemistry** **Speaking:** Describing the diagram: Connection of sciences **Academic English**: Rules for pronouncing metric system and symbols **Listening:** Integration of sciences: chemistry, physics and biology **Reading:** Dipole -Dipole interaction	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
7	**Consultation on Implementation of Mid-term Control 1**				
7	**Rubic control 1** **Midterm work:** **1.Rendering the text from English into Russian/Kazakh** **2.Putting 6 questions on the content of the text** **SPOC: Control work 1** Identify formal or informal. Reading **Writing**: Classification Essay. "Types of sources of an alternative energy".		1	In written form and orally	
8	**Midterm control 1**		25		
8	**PL 8 How scientific terms combine with common words** **Speaking:** Warming-up activity: Acids and fruits **Listening:** Acids **Academic English:** Scientific collocations	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz

	SPOC: Academic Skills for Master's Degree in Biology на платформе dl.kaznu.kz **Lesson 8:** **IWMT 4 Consultation on the IWS 4 implementation**				
8	**IWM 3 Writing:** The equipment, chemical dish and reagents which you usually use for your experimental works (not less than 10 sentences) **SPOC:** Home assignment: Reading skills: **Tip:** Scanning Pre-reading questions Text: $E=mc_2$ Post-reading question (quiz)		1	In written form and orally	
9	**PL 9 Experiment vocabulary** **Academic English:** **Reading:** **Text:** Benzene. **Listening:** Experiment with lemon juice **SPOC:** **Lesson 9:** Language Focus: Physical Description – gel electrophoresisLanguage Focus: Physical Description – gel electrophoresis	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
9	**SPOC:** Home assignment: Writing: Describe the process of turning DNA into protein in your own words.		1	In written form and orally	
10	**PL** 10 Writing techniques for clear experiment writing **Academic English:** writing techniques for describing an experimental part. **Speaking:** How do you usually carry out experiment? **Listening:** How to make chemical compound? **SPOC:** Academic Skills for Master's Degree in Biology на платформе dl.kaznu.kz **Lesson 10:** Experimenting	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
10	**IWM "The contribution of master's degree thesis to humanity" (presentation)**		1	In written form and orally	
10	**IWMT 5** **Consultation on the IWS 5 implementation**				

10	**IWM "The contribution of master's degree thesis to humanity" (presentation)**			In written form and orally	
	Module 3 Presentations, research vocabulary and research-paper style		20		
11	**PL11** **Signposts in presentation** **Academic English:** **Speaking:** What problem do I have when I make the presentation ? **Listening:** Chemical reactions **SPOC:** Academic Skills for Master's Degree in Biology on the platform dl.kaznu.kz	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
11	**Writing:** Describe any chemical reaction **Home assignment:** **SPOC:** Academic Skills for Master's Degree in Biology on the platform dl.kaznu.kz **Reading Skill:** The danger of drugs. Practice #3. Post-reading questions Practice #4. Chart **Additional material**: Differentiating between Fact and opinion		1	In written form and orally	
12	**PL12** **Presentation vocabulary** **Academic English: Expressions for successful presentation** **Reading and translation: General characteristics of oil and gas.** **Listening: Gas chromatography** **https://www.youtube.com/watch?v=6Z61ezJFfyA** **SPOC: Academic Skills for Master's Degree in Biology на платформе dl.kaznu.kz** **Lesson 12: Predicting**	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
12	**MOOC Academic Writing:** The Structure of a Research Paper. open.kaznu.kz https://open.kaznu.kz/courses/course-v1:FP+2023s2+2023_C3/about		1	In written form and orally	
12	**IWMT 6 Consultation on the IWM 6 implementation "The goals and objectives of my master's degree research"**				
12	**IWM 6 "The goals and objectives of my master's degree research"**		20		
13	**PL13** **Research vocabulary** **Academic English: Useful expressions for scientific writing**	3	4		Classroom lesson Asynchronous

	Reading and translation: Petroleum, chemical composition, properties. **Listening: Chemistry research** **https://www.youtube.com/watch?v=n64m2lh89vI**				on the platform SDL Moodle (dl.kaznu.kz
13	**"The goals and objectives of my master's degree research"** "The goals and objectives of master's degree research" **SPOC:** MIW #2 Writing. Bar chart		1		
14	**PL 14** **The style of writing research papers** **Academic English: techniques for writing scientific sentences** **Reading and translation: Carbon fibers.** **Speaking: The methods and computer tools which I will use for my master research** **SPOC: Academic Skills for Master's Degree in Biology on the platform dl.kaznu.kz** **Lesson 14: Reporting**	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
14	**SPOC:** Home assignment: Distinguishing fact from opinion. Reading the texts on specialty and putting the questions		1	In written form and orally	
15	**PL 15** **Chemical** **Speaking: Chemical industry: branches and products** **Academic English: Scientific collocations for graph description** **SPOC: Academic Skills for Master's Degree in Biology on the platform dl.kaznu.kz** **Final: Reading, Writing**	3	4	In written form and orally	Classroom lesson Asynchronous on the platform SDL Moodle (dl.kaznu.kz
15	**IWMT 7 Consultation on the IWM 7 implementation**		1	Consultation	
15	**IWM Defense of a report on the topic: "My master's degree thesis"**				
16	**Midterm control 2 tasks:** 1. Rendering the text on specialty from English into Russian/Kazakh 2. Putting 6 questions on the content of the text. 3. Writing on the topic.		20	In written form and orally	Classroom lesson
	Midterm control 2		100		

	Final control		100		
	Total for the course		100		

|Abbreviations:
PL-practical lesson;
HW-homework;
IWM-independent work of a master student;
IWMT-Independent work of a master student under supervision of the teacher,
LO-Learning outcome;
AI-Achievement indicator.

4.3 ***Express your comments about your expectations and concerns regarding the use of SPOC in your discipline.***
Expectations:
The usage of this SPOC in this discipline at first will increase the interests of master students in Biology in the course.
They will increase their ability to understand authentic lectures, reports, texts, and audio-visual materials in English in their own specialty. They will be able to prepare reports, presentations on a scientific topic and speeches in English at seminars, conferences, forums and in round-table discussions.
They will be able to express thoughts grammatically correctly.
They will be able to use biology vocabulary to support a conversation on a professional and scientific topic.
Risks:
Bad planning of master students' time to work on SPOC.
Technical problems during the completion of the SPOC assignments

Conclusion of the Chair of the Faculty Academic Council:

The SPOC: "English for Master's Degree Students in Biology" is an additional language project for the teacher, and for master students who are majoring in Biology specialties. It is also an indispensable tool for completing independent works, presentations, written assignment, increasing the level of knowledge of the English language according to their specialty. This online course also increases master students' interest in learning different topics in Biology. By the end of the online course, they can improve their all four language skills, like reading, listening, speaking and writing, and their English pronunciation. They can also feel themselves confident in speaking about Biology in English. By the time, master students finish this SPOC, they will have a better understanding of some of the scientific terms in biology and in their specialty.

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