MODULE SYLLABUS

SC 3 MANAGEMENT OF SCIENTIFIC PROJECTS
status is mandatory

It is implemented within the educational program «Food technology»

(name)

in the specialty 181 «Food technology»

(code, name)

Qualification: Doctor of Philosophy

the third (educational and scientific) level of higher education

Sumy-2023

Author: _____ (Stoyanets N., D. of E.S., Professor)

Author: _____ (Pasko Oleg, Candidate of Economic Sciences, Associate Professor of the Department of Management named after Professor L.I. Mykhaylova

| Module syllabus agreed at the Department of Management named by Professor L.I. Mykhailova meeting | Protocol № 14 from 10.06.2023 |
| | Head of Management Department named by Professor L.I. Mykhailova _____ (A. Oriekhova) |

Approved by:

Guarantor of the Academic program _____ Oksana MELNYK

Dean of the Faculty _____ Nataliia BOLHOVA

Head of the Department of Postgraduate and Doctoral Studies, where the educational program is implemented _____ Svitlana YAROSHCHUK

Syllabus review (attached) is provided by : _____ Svitlana GUBA
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Representative of the Department of Education Quality assurance, licensing and accreditation _____ (Nadiya Baraniyk)

Registered in electronic data base _____20.06_____ 2023

Syllabus review data:

The academic year in which changes are made	The Academic program attachment number with changes description	Changes revised and approved		
		Minutes No and date of the department meeting	Head of Department	Guarantor of the Academic program

1. MODULE OVERVIEW

1.	Title	MANAGEMENT OF SCIENTIFIC PROJECTS AND
2.	Faculty/Department	Faculty of Economics and Management/ Management Department
3.	Type	mandatory
4.	Program(s) to which module is attached	Educational and professional program " Food technology " in specialty 181 Food technology
5.	Module can be suggested for (to be filled in for optional types)	
6.	Level of the National Qualifications Framework	the third (educational and scientific) level of higher education Doctor of philosophy
7.	Semester and duration of module	1th semester, 10 weeks
8.	ECTS credits number	3

9.	Total workload and time allotment	Directed study			Self-directed study
		Lectures	Practicals	Labs	
		24	24		42

10.	Language of instruction	English
11.	Module leader	Stoyanets Nataliya – D.of E.S., Professor, Professor at the Management Department Hours of consultations - every Tuesday at 12.15, room 303 e
12.	Module leader contact information	Natalystoyanez@gmail.com
13.	Module description	The educational component "Management of scientific projects and registration of intellectual property rights" is aimed at mastering the necessary basic components of project management by candidates for the degree of Doctor of Philosophy: building the organizational structure of the project team, directions and content of project structuring, the essence of planning, features of project budget planning. The educational component provides for highlighting the features of control and assessment of project work, approaches to ensuring quality requirements, project risk management, and contains theoretical tasks for task control.
14.	Module aim	The purpose of the educational component is to prepare candidates for the degree of Doctor of Philosophy to carry out scientific and project activities, familiarize them with the strategy and tactics of implementing the strategy of a scientific project, provide knowledge about the methodology, techniques and tools of research and preparation of sections of a scientific project, aspects of implementing the results obtained. Involvement of candidates for the degree of Doctor of Philosophy in the analysis of information sources, organization of scientific activities and opportunities for testing a scientific project.
15.	Module Dependencies (prerequisites, co-	is the formation and development of a scientific outlook and the scientific creativity of the researcher - graduate student and

	requisites, incompatible modules)	students' acquisition of skills and competencies to set scientific tasks, plan their implementation, organize the collection and processing of information, create conditions for the generation of new ideas and their practical implementation. 1. The educational component is based on the study of the OK: "Philosophy of Science" 2. The educational component is the basis for the study of the OK: "Modern information technologies in scientific activity."
16.	The policy of academic integrity	According to the Code of Academic Integrity of Sumy NAU, academic integrity is a set of principles, rules of conduct of participants in the educational process, aimed at forming an independent and responsible personality, able to solve problems in accordance with the educational level in accordance with law and public morality. Academic integrity of applicants for higher education involves independent performance of educational tasks, tasks of current and final control, learning outcomes. It is expected that higher education students will adhere to the principles of academic integrity, aware of the consequences of its violation, which is determined by the regulations of Sumy National Agrarian University, including the Code of Academic Integrity, Regulations on Prevention and Detection of Academic Plagiarism in Sumy NAU. https://snau.edu.ua/viddil-zabezpechennya-yakosti-osviti/zabezpechennya-yakosti-osviti/akademichna-dobrochesnist/). For violation of academic integrity, applicants for higher education may be held subject to such academic liability, namely: - academic fraud (use of the telephone when writing written works) will lead to re-submission of work; - write-off - from the first warning to cancel the job; - plagiarism will cancel the job
	keywords:	project management, strategic planning, project life cycle, project team, risk management, resource allocation, patents, copyrights, intellectual property law, IP protection.
17	Link in Moodle	https://cdn.snau.edu.ua/moodle/course/view.php?id= 5999

2. CORRELATION BETWEEN MODULE LEARNING OUTCOMES (MLOs) AND PROGRAM LEARNING OUTCOMES (PLOs)

MLOs: On successful completion of the module the learner will be able to:	Program learning outcomes that the SC aims to achieve (indicate the number according to the numbering given in the SP)			How assessed
	PLO 6	PLO 8	PLO 12	
MLOs 1. Know the theoretical essence, general characteristics and justification of the feasibility of managing scientific projects.	x	x		Multiple-choice tests, writing essays in oral format
MLOs 2. Predict modern trends in planning resources, costs and the project budget, taking into account its structuring. Understand the technology for assessing project activities, taking into account planning resources, costs of the project budget	x	x		Presentation preparation,
MLOs 3 Solve complex specialized tasks and practical tasks in the field of international scientific and technical cooperation of the European Union and Ukraine in the context of projects and programs	x		x	Multiple-choice tests, writing essays in oral format
MLOs 4. Understand the acquired knowledge, subject area, using the theoretical basis for organizing the structure of a scientific project and general approaches to planning and their control		x	x	Multiple-choice tests, writing essays in oral format

PLO6. Develop and implement scientific and/or innovative engineering projects that provide an opportunity to solve significant scientific and applied problems in the field of food production, taking into account social, economic, environmental and legal aspects.

PLO8. Develop and teach special disciplines in food technology in higher education institutions, provide educational and methodological support for the educational process.

PLO12. Develop grant proposals, technical documentation and industry recommendations in the field of food production, formulate their own author's conclusions, proposals and recommendations.

3. MODULE INDICATIVE CONTENT

Topic. List of issues to be considered within the topic	Distribution of hours			Learning resources
	Directed study		Directed study	
	Lectures	Practicals	Lectures	
TOPIC 1. GENERAL CHARACTERISTICS OF PROJECT MANAGEMENT 1. Project and the specifics of project activities. 2. Types of scientific projects. 3. Scientific project management. 4. Project life cycle. 5. Characteristics of a project manager.	4	4	8	1-2
Topic 2. Project Management Body of Knowledge (7th edition) and Project Management Standard 1. Evolution of the Project Management Body of Knowledge: How has the project management standard changed? 2. The role of PMI in the development of the project management profession 3. Fundamentals of the Project Management Body of Knowledge (7th edition): The transition from processes to principles Modern challenges and prospects in the project management profession	4	4	8	1-4
Topic 3. Value delivery system 1. Value creation. 2. Organizational governance systems. 3. Functions related to projects. 4. Project Environment. 5. Product Management Considerations	4	4	8	1-2
Topic 4. Project Management Principles 1. The 4 Values Underpinning the PMI Code of Ethics and Professional Conduct 2. Be a Diligent, Respectful, and Caring Steward 3. Create a Collaborative Environment for the Project Team.. 4. Effectively Engage Stakeholders 5. Focus on Value.. 6. Recognize, Evaluate, and Respond to System Interactions 7. Demonstrate Leadership Behavior	2	2	8	1-2

8. Adapt to Context. 9. Build Quality into Processes and Deliverables 10. Overcome Complexity 11. Optimize Risk Response 12. Choose Adaptability and Resilience 13. Enable Change to Achieve the Envisioned Future State				
Topic 5. Ukrainian National Science Competitions. 1. Competition of projects of fundamental scientific research, applied scientific research and scientific and technical (experimental) developments of young scientists. 2. Competitive selection of scientific and technical (experimental) developments by state order. Competitions of the National Research Fund.	4	4	5	1-2
Topic 6. Horizon Europe and Erasmus+ annual competitions 1. Horizon Europe Pillar 1 – Excellent science. 2. Horizon Europe Pillar 2 – Challenges; 3. Horizon Europe Pillar 3 – Innovative Europe 4. ERASMUS+ PROJECTS KA2 AND ERASMUS+ JEAN MONNET	4	4	5	1-2
In total	24	24	42	

4. TEACHING AND LEARNING METHODS

MLOs	Teaching methods (directed study)	Hours	Learning methods (self-directed study)	Hours
MLOs 1. Know the theoretical essence, general characteristics and justification of the feasibility of managing scientific projects.	Lecture, practical occupation, discussion relevant issues	10	Independent work with the textbook, performance of individual tasks	10
MLOs 2. Predict modern trends in planning resources, costs and the project budget, taking into account its structuring. Understand the technology for assessing project activities, taking into account planning resources, costs of the project	Problem lecture, thematic discussion, analysis of specific situations (Case-study)	10	Independent work with the textbook, performance of individual tasks	10

budget				
MLOs 3 Solve complex specialized tasks and practical tasks in the field of international scientific and technical cooperation of the European Union and Ukraine in the context of projects and programs	Problem lecture, thematic discussion, analysis of specific situations (Case-study)	10	Independent work with the textbook, performance of individual tasks	10
MLOs 4. Understand the acquired knowledge, subject area, using the theoretical basis for organizing the structure of a scientific project and general approaches to planning and their control	Problem lecture, thematic discussion, "round table", "Brainstorming".	10	Independent work with the textbook, performance of individual tasks	20
Total		40		50

5. ASSESSMENT
5.1. Diagnostic assessment
5.2. Summative assessment
5.2.1. Intended learning outcomes methods:

№	Summative assessment methods	Grades	Deadline
	Testing	20/20%	During the semester
	Multiple choice test (intermediate certification)	15/15%	On the 7th week
	IT (individual tasks for classroom work; individual tasks for independent performance)	35/35%	At the end of each practical session; on the 14th week
	Exam (by tickets)	30/30%	According to the schedule of the session

5.1.1. Grading criteria

Summative assessment method	Unsatisfactory	Satisfactory	Good	Excellent
Testing	*< 12 points*	*12-14 points*	*15-17 points*	*18-20 points*
	the correct answer was provided for less than 60% of the tasks	*the correct answer was provided for 60%-74% of the tasks*	*75% - 89% of tasks were answered correctly*	*90% or more tasks were answered correctly*
Multiple choice test (intermediate	*< 8 points*	*8-10 points*	*11-13 points*	*14-15 points*
	< 5 correct answer	*5-6 correct answer*	*7-8 correct*	*9-10 correct answer*

certification)			answer	
Individual tasks	*< 20 points*	*20-26 points*	*27-30 points*	*31-35 points*
	Task requirements not met	*Most of the requirements are met, but some components are missing or insufficiently disclosed.*	*All requirements of the task have been fulfilled.*	*All the requirements of the task were fulfilled, the results were presented as part of a general discussion.*
Exam (by tickets)	*< 20 points*	*20-24 points*	*25-27 points*	*28-30 points*
	Task requirements not met	*Most of the requirements are met, but some components are missing or insufficiently disclosed.*	*All requirements of the task have been fulfilled.*	*All the requirements of the task were fulfilled, the results were presented as part of a general discussion.*

Formative assessment

Formative exercises are designed to enable students to develop particular aspects of their learning, prior to summative assessments. Formative exercises are designed to help students use feedback and self-reflection to manage and develop their learning so that they can see how to improve their work.

№	Formative Assessment elements	Date
1	Testing in Google Forms, Kahoot, Quizizz	At each practical lesson (introductory control)
2	Oral feedback from the teacher and students on the implementation of individual calculation and analytical tasks	For 5 weeks
3	Oral feedback from the teacher and students on the performance of an individual task on the main types of empirical social research	For 10 weeks
4	Oral feedback from the teacher and students on the implementation of the individual task of choosing sociometric criteria	For 15 weeks
5	Oral feedback from the teacher and students on the project implementation (preparation, presentation, defense)	For 18 weeks

Self-assessment can be used as an element of summative assessment and formative assessment.

6. LEARNING RESOURCES
6.1.Key resources
6.1.1. Textbooks, manuals

1. Martina Huemann and Rodne. The Handbook of Project Management Sixth Edition Edited by y Turner 2024
by Routledge 4 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN
https://rpitst.com/img/ebook/1711029511_630733f488172765377f.pdf
2. Md. Awal Hossain Mollah Handbook of Project Management: Principles and Techniques 2021
Publisher: Scholars' PressI University of Rajshahi SBN: 978-613-8-95196-4
https://www.researchgate.net/publication/350516240_Handbook_of_Project_Management_Principles_and_Techniques

3. Prof. Rupinder Tewari Ms. Mamta Bhardwaj Intellectual Property A Primer for Academia Publication Bureau
Panjab University Chandigarh. https://dst.gov.in/sites/default/files/E-BOOK%20IPR.pdf
4.SELECTED ONLINE READING AND LIBRARY INFORMATION SOURCES ON INTELLECTUAL PROPERTY LAW http://www.epgencms.europarl.europa.eu/cmsdata/upload/8edf0d4b-03b7-4a5e-b0d5-5c3bc68f8900/Selected_reading-Intellectual_Property_Law.pdf
5.Intellectual Property (IP) Handbook Providing IP Guidance through the EEN Client Journey
An easy-to-consult guide for EEN advisors https://www.eenbasque.net/wp-content/uploads/2024/01/ip_guide_een_final.pdf

1. Vasilyeva T.A., Kuzmenko O.V., **Stoyanets** N.V., Artyukhov A.E., Bozhenko V.V., (2022) "The Depiction of Cybercrime Victims using Data Mining Techniques" Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu, 2022, No 5 P.169 -173 ISSN 2071-2227, E-ISSN 2223-2362, https://doi.org/10.33271/nvngu/2022-5/174
2. . Hejun Zhao, **Stoyanets** Nataliya, Guohou Li (2021) Aplication of big data analysis in path planning of intelligent picking robot INMATEH Vol. 65, No. 3 https://www.researchgate.net/publication/358390890_APPLICATION_OF_BIG_DATA_ANALYSIS_IN_PATH_PLANNING_OF_INTELLIGENT_PICKING_ROBOT

International specialized search engines

http://info.studyweb.com – a specialized search system for educational resources http://infomine.ucr.edu – a virtual library of electronic publications http://searchenginewatch.com/links/Specialty_Search_Engines – a catalog of specialized search engines

http://www.sciseek.com – search for scientific information Ukrainian specialized search systems

http://meta-ukraine.com/ Meta is a Ukrainian search engine with a wide search system for various topics, including a selection of electronic dictionaries.

English-language search engines

http://www.yahoo.com/ - an English-language search engine with the most developed structure of catalogs and various services. Hundreds of thousands of different Internet resources are manually sorted by 14 main headings, each of which has several subheadings with narrower topics.

http://www.lycos.com/ - Lycos includes a huge database with more than 66 million URLs. This search engine (in English) contains a variety of interesting information, including news, node reviews, links to popular nodes, city maps, as well as tools for finding addresses of different people and searching for web images and sound clips.