Syllabus of the course
«*Methodologies of Scientific Research*»

Specialty	*F3 Computer Science*
Study Programme	*Computer Science*
Study cycle (Bachelor, Master, PhD)	*the second (Master) level of higher education*
Course status	*mandatory*
Language	*English*
Term	*first year, first semester*
ECTS credits	*5*
Workload	*Lectures – 16 hours.*
	Practical studies – 34 hours.
	Laboratory studies – 0 hours.
	Self-study – 100 hours.
Assessment system	*Grading*
Department	*Information System, Room 413 (Main Building), (057)702-18-31, https://kafis.hneu.net/*
Teaching staff	*Oleksandr KOLGATIN, professor of the Information System Department, doctor of pedagogical science, PhD in low temperatures physics*
Contacts	*Oleksandr.Kolgatin@hneu.net*
Course schedule	*According to the schedule http://rozklad.hneu.edu.ua/schedule/schedule?employee=451994*
Consultations	*According to the schedule of the Information System Department (chat PNS)*

Learning objectives and skills:

formation of students' worldview on issues of modern science and acquisition of skills in the practical application of information technologies, information systems and publicly available resources for the implementation of elements of scientific research as a component of professional activity in the field of computer science.

Structural and logical scheme of the course

Prerequisites	Postrequsites
	Course Work Graduate Work

Course content

Content module 1 *Methodologies of scientific communication*
Topic 1 Science as a Part of Universal Culture of Humanity
Topic 2 Sources of Scientific Information
Topic 3 Basics of Scientific Documentation
Topic 4 Scientific Conference Participation and Organization
Content module 2 *Methods of modelling in science*
Topic 5 Principals of Modelling
Topic 6 Stochastic Models and Statistical Analysis
Topic 7 Mathematical Methods for Information Model Analysis
Topic 8 Model Verification and Simulations

Teaching environment (software)

S. Kuznets Distance learning tools:
Website of personal training systems: https://pns.hneu.edu.ua
Library: http://library.hneu.edu.ua
Repository:
http://www.repository.hneu.edu.ua
Corporate Zoom system

Assessment system

Assessment of students' learning outcomes is carried out by the University according to the cumulative 100-point system.

Current control is carried out during lectures and practical (seminar) classes and aims to assess the level of students' readiness to perform particular tasks, and is assessed by the amount of scored points.

The maximum amount during the semester – 100 points; the minimum amount required is 60 points.

Current control includes the following assessment methods: assignments on a particular topic; testing; presentations, and essay writing.

More detailed information on assessment and grading system is given in the technological card of the course.

Course policies

Teaching of the academic discipline is based on the principles of academic integrity.

Violation of academic integrity includes academic plagiarism, fabrication, falsification, cheating, deception, bribery, and biased assessment.

Education seekers may be brought to the following academic responsibility for breach of academic integrity: repeated assessment of the corresponding type of learning activity.

More detailed information about competencies, learning outcomes, teaching methods, assessment forms, self-study is given in the Course program