

Name. Methodology and organization of scientific research

Code. 6006

Type. General education

Year of study. 2018-2019

Semester. II

Number of ECTS credits. 6

Name of the lecturer, degree, position. Pushkar O.I., doctor of economic sciences, prof., Head of the department computer systems and technologies

Study results:

- to conduct independent scientific research, characterized by academic integrity, based on modern theories and methods of analysis; to formulate the subject, problem and purpose of scientific research; to allocate object and target of research;
- to develop a plan for conducting research work; to organize research activities effectively; to choose and use the modern methodology of research efficiently;
- analyze, evaluate and compare different theoretical concepts in the field of research and draw conclusions;
- to conduct scientific research using empirical methods; to carry out the processing of empirical data and to build mathematical models on their basis;
- to formulate hypotheses, to develop classifications, to obtain and substantiate scientific results using the methods of theoretical research;
- to analyze complex systems, to use the existing information base from different sources effectively, to analyze and process information;
- to perform design, presentation, protection and implementation of research results;
- to generate one's own new scientific ideas, to notify knowledge and ideas to the scientific community, expanding the boundaries of scientific knowledge;
- to plan and forecast further professional development;
- to have the ability to analyze critically; to evaluate and compare various scientific theories and ideas, analytical and experimental scientific activities;
- to have the capacity for scientific writing and scientific communication, rhetoric and public speaking at international scientific forums, conferences and seminars.

Compulsory prior academic disciplines. Philosophy of science, discipline of professional orientation of master's programs

Content. Science and scientific research. Scientific method. Methodology of scientific research. Empirical Research Methods and Tools for Data Processing for Empirical Research. Theoretical methods of research. Systemic research method. Methodology for the study of complex systems. Models and method of modeling in scientific research. Organization of scientific activity and scientific research. Information maintenance of scientific research. Design forms of scientific research. Technology of work over the thesis. Presentation, protection and implementation of research results. Technology and psychology of scientific creativity. Development of abilities for scientific activity.

Recommended sources

Basic:

1. Pushkar A.I.. Potrashkova L.V. Osnovy nauchnykh issledovaniy i organizatsiya nauchno-issledovatel'skoy deyatel'nosti». Uchebnoye posobiye. – Kharkov: Izd. INZhEK. 2009. – 289 s. (Russk. yaz.)
3. Asherov A.T. Podgotovka. ekspertiza i zashchita dissertatsiy: Uchebnoye posobiye. – Kharkov: Izd. UIPA. 2002. – 136 s.
2. Ruzavin G.I. Metodologiya nauchnogo issledovaniya: Uch. posobiye dlya VUZov. – M.: Yuniti-DANA. 2005. - 287 s.
4. Morozov V Kultura pismennoy nauchnoy rechi. M.: Ikar. 2008. — 268 s. — ISBN 978-5-7974-0144-5.
5. Fayerabend P. Izbrannyye trudy po metodologii nauki. – M.: Progress. 1986. – 544 s.

Additional:

6. Prigozhin Ilia "Filosofiya nestabilnosti" // Voprosy filosofii N 6. ctr. 46-57 (1991)
7. Narinyan A.R. Osnovy nauchnykh issledovaniy [Tekst] : ucheb. posobiye / A. R. Narinyan. V. A. Pozdeyev ; Evropeyskiy un-t. - K. : Izdatelstvo Evropeyskogo un-ta. 2002. - 109 s.: ris. - Bibliogr.: s. 108-109.
8. Bertran Rassel Chelovecheskoye poznaniye. ego sfera i granitsy/ - Nika-Tsentr. Institut obshchegumanitarnykh issledovaniy M.: 2001.- 150s.
9. Requirements for peer-reviewed journals developed by the Elsevier Publishing House in accordance with international ethical rules of scientific publications. - RID ELSYVER LLC (version February, 2010)

Informational resources:

10. Kasianenko V. O. Modelyuvannya ta prognozuvannya ekonomichnikh protsesiv [Elektronniy resurs] / V. O. Kasianenko. – Rezhim dostupu : <http://sumdu.telesweet.net/doc/lections/Modelyuvannya-ta-prognozuvannya-ekonomichnih-protsesiv/index.html>.
11. O priznakakh nauchnoy novizny ekonomiceskikh dissertatsiy [Elektronniy resurs] / Belousov V. I. – Rezhim dostupu: <http://www.kapital-rus.ru/index.php/articles/article/176696>
12. / Impakt faktor [Elektronniy resurs] / Material iz Vikipedii – Rezhim dostupu: <https://ru.wikipedia.org/wiki/Impakt-faktor>
13. Elli Kristall Vselennaya kak hologramma [Elektronniy resurs] / – Rezhim dostupu: <http://www.crystalinks.com/holographic.html>
14. Pereosmisleniya ekonomiki yak nauki [Elektronniy resurs] / – Rezhim dostupu: www.kmbs.kiev.ua/studio
15. Ekonomika i upravleniye na predpriyatyiakh: nauchno-obrazovatelnyy portal. [Elektronniy resurs] /– Rezhim dostupu

Methods of study. Lectures, seminars, practical classes.

Methods of assessment.

ongoing control (survey); individual research project; final test; final control.

Language of instruction. Ukrainian