

**Entrance exam program
in training of highly qualified personnel
(Ph.D. program)
5.6. “HISTORICAL SCIENCES”**

Entrance exam program for the postgraduate Ph.D. program in training of highly qualified personnel
5.6. “HISTORICAL SCIENCES” includes the following sections:

The History of Science and Technology

General and Methodological Problems of Historical Research. Goals and objectives of the History of Science and Technology. History of Science and Technology in the system of modern scientific knowledge. Connection of history with other humanities and natural sciences.

The study of the problems of classification of science and the ways of evolution of the structure of individual sciences or fields of scientific knowledge. The essence and classification of Historical and Scientific Research, the formation of its conceptual apparatus. The place of science and sociology of science in the development of Historical and Scientific Research; Historical and Technical Research. Science as a Special Social Institution. General and methodological problems of historical and scientific research. The history of science and technology in the system of modern scientific knowledge.

Historical source and features of its use. Problems of analysis and interpretation of a historical source. Historiography as an element of research culture. Principles and structure of historiographic research.

Socio-cultural Problems of the Development of Science and Technology. Science and Society, Science and the State, Science and Culture. Main Factors of Science and Technology Development.

Main Stages of Natural Science Development. Science in the Context of the Civilization Development. Connection of Science with the Socio-cultural Conditions of Different Eras in the History of Mankind. Accumulation of Knowledge in the Prehistoric Era. Ancient World: Early Civilizations. Pre-classical Scientific and Technical Knowledge. Classical Science. Non-classical Science. Features of the Science of the Twentieth Century (post-non-classical science).

The study of the main trends and patterns of formation and development of individual sciences or branches of scientific knowledge. The study of the main links between the demands of practice and the development of scientific knowledge. The history of the formation and development of scientific schools and trends, the role of their founders – leading scientists – in the development of world science, the establishment and justification of priorities in discoveries, in the development of new methods of fundamental theories and practice.

Recommended literature:

1. Azimov A. Brief history of biology: from alchemy to genetics. M., 2002.
2. Akhutin A.V. Experiment and nature. M., 2012.
3. Borodulin V.I. Clinical medicine from its origins to the 20th century. M., 2015.
4. Voronkov Yu. S. History and Methodology of Science. Textbook. M., 2019.
5. Wootton D. The Invention of Science: A New History of the Scientific Revolution, 2018.
6. Gaidenko P.P. Evolution of the concept of science: formation and development of the first scientific programs. M., 2010.
7. Danneman F. History of natural sciences. Natural sciences in their development and interaction. In 3 books. M., 2011.
8. Condorcet J. A. Sketch of the historical picture of the progress of the human mind. M., 2010.
9. History of medicine: Textbook for universities. / Ed. Krylov N.N. M., 2023.
10. Kuhn T. The structure of scientific revolutions. M., 1998.
11. Markova L.A. The Science. History and Historiography of the 19th–20th centuries M., 1987.
12. Matyash T.P. Philosophy and history of science and technology: Textbook. M., 2017.
13. Nikiforov A.L. Philosophy and History of Science: Textbook. M.: Infra-M, 2018.
14. Perlov A.M. History of science: Introduction to the methodology of humanitarian knowledge. M., 2018.

15. Platonova S.I. History and Philosophy of Science: Textbook. M., 2019.
16. Polikarpov V.S. History of Science and Technology: Textbook. St. Petersburg, 2019.
17. Sorokina T.S. History of Medicine. In 2 volumes. (13th edition, revised and enlarged). M, 2021.
18. Stepin V.S., Stochik A.M., Zatravkin S.N. History and Philosophy of Medicine. Scientific revolutions in medicine in the 17th-21st centuries. M., 2020.
19. Stepin V. S. History and Philosophy of Science. Textbook. Ed. 3rd. M., 2020.
20. Stochik A.M., Zatravkin S.N. Reformation of practical medicine in the process of scientific revolutions of the 17th-19th centuries. M., 2012.
21. Shishkov I.Z. History and philosophy of science. M., 2019.
22. Ferngren G. B. Science and Religion: Historical Introduction. Baltimore, 2002.
23. Nutton V. Ancient Medicine. London – N. Y.: Routledge, 2013.

Internet resources:

1. Brooks H. The relationship between science and technology. Research Policy, 1994, vol. 23, issue 5, 477-486. <https://www.belfercenter.org/sites/default/files/legacy/files/sciencetechnology.pdf>
2. Bunch Bryan, Hellemans Alexander. The History of Science and Technology. Houghton Mifflin Company. Boston. New York. 2004.
https://drive.google.com/file/d/0B9bX852JMJ__OGY5YzFkZmQtNzU5NS00MzJlTkYzNmMtMjQ1M0RmNzA5ODE2/view?hl=en&resourcekey=0-53qfn2Ty7StQV43L1gvsUA
3. Dear P. The Intelligibility of Nature: How Science Makes Sense of the World, University of Chicago Press, 2006. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/hselibrary-ebooks/detail.action?docID=408543>
4. Foltá Jaroslav. What to do with the 20th Century in the History of Science and Technology? (Problems of historiography of science and technology). https://www.ntm.cz/data/veda-a-vyzkum/publikace/what_to_do_20_century.pdf
5. Heilbron J.L.(ed.), The Oxford Companion to the History of Modern Science. Oxford: Oxford University Press, 2003
<https://www.oxfordreference.com/view/10.1093/acref/9780195112290.001.0001/acref-9780195112290>
6. Pickstone J.V. Ways of Knowing: A New History of Science, Technology and
7. Medicine. Chicago : University of Chicago Press, 2001
8. Shapin S. The Scientific Revolution (Science.Culture). Chicago: University of Chicago Press, 2019
9. Library of the Faculty of Philosophy of Moscow State University <https://philos.msu.ru/lib/>
10. Cochrane Library <https://www.cochranelibrary.com/>
11. International archive of electronic scientific articles <http://arxiv.org/>
12. Scientific electronic library <http://elibrary.ru/>
13. Medline Scientific Bibliographic Database (PubMed) <http://www.ncbi.nlm.nih.gov/pubmed/>
14. Scientific and bibliographic database Scopus <http://www.scopus.com/>
15. Patent database of the Russian Federation (ROSPATENT) <http://wwwl.fips.ru/>
16. US Patent Database (USPATFULL) <http://www.uspto.gov/>
17. Project ROOTS <https://evolkov.net/critic.think/>
18. Federal Electronic Medical Library, <https://femb.ru/femb/>
19. Electronic Library of the First Moscow State Medical University <http://edu.rucml.ru/>
20. Electronic library of the RSL <http://www.rsl.ru/>
21. Electronic library system "Lan" textbooks and monographs on history and historical sciences, on political science and social science, <https://e.lanbook.com/>
22. Electronic books for education and business <https://biblioclub.ru/>