Документ подписан простой электронной подписью
Информация о владельце:
ФИО: Верисокин Александр Евгеньевич
Должность: И.о. директора института наук о земле
Дата подписания: 20.06.2023 15:24:56
Уникальный программный ключ:
bba78f4c385ebf765cda3fef3917df7dfeb1e004

Annotation to the work program of the discipline

Name disciplines	**Научно-исследовательская работа / Scientific-Research Work**
Summary	Search, accumulation and processing of scientific and technical information. Conducting research calculations using Mathcad. Writing a report for a scientific conference. Preparation of the presentation of the report. Speech with a report at a scientific conference. Registration of abstracts of the report for submission to the collection of scientific papers. Processing the results of experimental studies and their design in the form of a scientific article. Mathematical modeling of the system under study, its decomposition. Choice of efficiency criterion. Evaluation of the effectiveness of research. The concept and content of the final qualification work. The sequence of the qualification work. Design of the qualification work. Technical and intellectual creativity and its legal protection. Search, accumulation and processing of patent information. Development of new technical solutions, drawing up schemes of the proposed devices. Making an application for the proposed invention.
The results of mastering the discipline (module)	knows how to plan and conduct the necessary experiments, process, including using applied software products, interpret the results and make appropriate ones; conclusions; applies knowledge about the directions of scientific research in the oil and gas industry; gives a rationale for the relevance and purpose of their own research with their subsequent presentation at conferences and seminars; is able to write science-based reports on problems in the oil and gas industry; owns methods of presenting the results of his own research in the form of a computer presentation.

labor input cu	3
Reporting Forms (including by semesters)	Graded (grading)

List of basic and additional literature necessary for mastering the discipline

Main literature	1. Kuznetsov I. N. Scientific research: Methodology and design. - 2nd ed., Revised. and additional - M .: Publishing and trading corporation "Dashkov and K0", 2006. - 460 p. 2. Polovinkin A.I. Fundamentals of engineering creativity: study guide. - St. Petersburg: Publishing House Lan, 2012. - 368 p. 3. Shklyar M.F. Fundamentals of scientific research. UP.-M.: Ed. house "Dashkov and K", 2008. - 243p. 1. Bromberg G. V. Fundamentals of the patent business: Textbook. - M. : Exam, 2002. - 223 p.

Additionalliterature	1. Tikhonov V.A., Kornev N.V., Verona V.A., Ostroukhov V.V. Fundamentals of scientific research: theory and practice. - St. Petersburg: Helios ARV, 2006. 2. Lantukh N. I. Fundamentals of licensing and certification activities: study guide / Rec. V. V. Fedorenko, V. P. Mochalov. - Stavropol: SevKavGTU, 2005. - 86 p. 3. Varfolomeeva Yu. A. Intellectual property in the conditions of innovative development. - M.: Os-89, 2007. - 144 p. 4. Dyakonov V.P. Mathcad 8-12 for students. – M.: SOLON-Press, 2005. - 632 p. 5. Petrov V. Algorithm for solving inventive problems. - Tel Aviv, 1999.