Документ подписан простой электронной подписью
Информация о владельце:
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Annotation to the work program of the discipline

Namedisciplines	**Химия / Chemistry**
Summary	Fundamentals of atomic and molecular theory, types of chemical bonding, fundamentals of chemical thermodynamics, electrochemistry and chemical kinetics, modern ideas about chemical equilibrium, properties of solutions, redox reactions. Have an understanding of both the chemical and physical-chemical analysis of substances, fundamentals of organic chemistry.
resultsdevelopment disciplines (module)	Knows the concepts of the main sections of modern chemical science Knows the basic concepts and methods of studying fundamental chemistry Can compare the technology for conducting typical experiments on standard equipment in the laboratory and in production Able to process the results of research activities using standard equipment, instruments and materials Has the skills to solve chemical problems Owns the technique of experimentation using software packages
labor input, cu.	4
Form reporting	Exam
List of basic and additional literature necessary for mastering disciplines	
Main literature	1. Egorov, V. V. General Chemistry Electronic resource / Egorov VV : a textbook for universities. - 2nd ed., erased. - St. Petersburg: Lan, 2021. - 192 p. - ISBN 978-5-8114-6936-9 2. Akhmetov, N. S. General and inorganic chemistry Electronic resource / Akhmetov N. S.: a textbook for universities. - 12th ed., erased. - St. Petersburg: Lan, 2021. - 744 p. - ISBN 978-5-8114-6983-3 3. Press, I. A. General Chemistry Electronic resource / Press I. A. - St. Petersburg: Lan, 2021. - 496 p. - ISBN 978-5-8114-7073- 4. Press, I. A. Organic chemistry Electronic resource / Press I.A. - St. Petersburg: Lan, 2021. - 432 p. - ISBN 978-5-8114-7074-7 5. Barkovsky, E. V. General Chemistry Electronic resource: Textbook / E. V. Barkovsky, S. V. Tkachev, L. G. Petrushenko. - General Chemistry, 2021-10-06. - Minsk: Higher School, 2013. - 641 p. - The book is in the premium version of EBS IPR BOOKS. - ISBN 978-985-06-2314-0
additional literature	1. Golbraikh, Z. E. Collection of tasks and exercises in chemistry: textbook. allowance for universities / Z. E. Golbraikh, E. I. Maslov. - 6th. ed. - M.: AST-Astrel, 2004. - 383 p. - (Graduate School). - Grip: Extra. MO. - App.: p. 351-374 2. Chemistry Electronic resource: workshop / S.N. Solovieva / A.V. Povolotsky / A.V. Serov / V.P. Timchenko. - Stavropol: North Caucasian Federal University, 2015. - 225 p. - The book is in the basic version of EBS IPRbooks. 3. Chemistry: laboratory workshop / Ministry of Education and

	sciences of the Russian Federation; Federal State Autonomous Educational Institution of Higher Professional Education "North Caucasian Federal University"; auth.-stat. V. P. Timchenko; auth.-stat. A. V. Serov; auth.-stat. A. V. Povolotsky; auth.-stat. S. N. Solovyova. - Stavropol: NCFU, 2015. - 225 p. : ill. -http://biblioclub.ru/.