

Документ подписан простой электронной подписью
 Информация о владельце:
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Discipline annotation

Discipline name	Математический анализ / Mathematical analysis
Summary	Sets, complex and real numbers Sequences and their limits Basic elementary functions Function limit properties Continuity of functions and their main properties Derivative and differentiable functions Function differential Basic theorems of differential calculus and their applications Antiderivative and indefinite integral Number series Power series Fourier series
Learning outcomes of the discipline	- operates with elements of numerical fields, linear spaces, linear operators, matrices, vectors, linear and non-linear geometric objects; solves systems of linear equations; applies algebraic methods to solve geometric problems; applies algebraic and geometric methods to solve applied problems, as well as evaluates the quality of the solutions obtained; demonstrates the ability to abstract, including the ability to logically develop individual formal theories and establish a connection between them. - able to use mathematical methods and software technologies for working with algebraic structures to solve professional tasks.
Workload, c. u.	7c. u.
Reporting Forms	Exam- 2nd semester
List of essential and supplementary literature necessary for mastering the discipline	
Essential literature	1. Tuganbaev A. A. Mathematical analysis: series. Study guide. Flinta Publisher, 2014. - 49 p. 2. Zaporozhets G. I. Guide to solving problems in mathematical analysis. Study guide. Publisher: Lan, 2014. - 464 p.
Supplementary literature	1. Budaev V. D., Yakubson M. Ya. Mathematical analysis. Functions of one variable. Textbook. Publisher: Lan, 2014. - 544 p. 2. Tuganbaev A. A. Mathematical analysis: limits. Study guide. Publisher: Flinta, 2013. - 65 p. 3. Tuganbaev A. A. Mathematical analysis: derivatives and graphs of functions. Study guide. Publisher: Flinta, 2013. - 88 p. 4. Tuganbaev A. A. Mathematical analysis: integrals. Study guide. Publisher: Flinta, 2013. - 88 p. 5. Berman G. N. Solutions manual to the collection of problems in the course of mathematical analysis. Study guide. Publisher: Lan, 2013. - 608 p.