

Документ подписан простой электронной подписью

Информация о владельце:

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Должность: И.о. декана факультета нефтегазовой инженерии

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Annotation to the work program of the discipline

Name	Разработка и эксплуатация нефтяных и газовых месторождений /
disciplines	Development and Operation of Oil and Gas Fields
Summary	Oil field development modes: water-pressure, gas-pressure, elastic, gravitational, dissolved gas regime. Reservoir properties of rocks. Basic properties of oil, oil gas, formation water. Stages of development of oil fields. Technological design documents. Drafting of project documents. Possible types (sets) of design solutions. Oil field development system. Choice of development object. General characteristics of field development parameters. Stages of development of oil fields. Problems and options for the development of oil fields. Oil field development systems with flooding: well placement, well pattern density, undesirability of water in well production, positive aspects of reservoir flooding, edge and edge flooding, in-loop area flooding and in-line systems. Development of an oil field with gas injection into reservoirs. Technology of reservoir pressure maintenance systems. Oil recovery of reservoirs, its limiting factors. Control of development of oil fields. Analysis of the development of oil fields. Regulation of the oil field development process, its goals and methods. Regulation of the oil field development process by lowering the bottomhole pressure, boosting fluid withdrawals, limiting the inflow of associated water, shutting down high-watered wells, shifting the injection front, leveling the inflow profiles (injectivity), using spot flooding, drilling additional wells. Protection of the environment and subsoil. Choice of operational object. Modern magnification methods Development of an oil field with gas injection into reservoirs. Technology of reservoir pressure maintenance systems. Oil recovery of reservoirs, its limiting factors. Control of development of oil fields. Analysis of the development of oil fields. Regulation of the oil field development process, its goals and methods. Regulation of the oil field development process by lowering the bottomhole pressure, boosting fluid withdrawals, limiting the inflow of associated water, shutting down high-watered wells, shifting the injection front, leveling the inflow profiles (injectivity), using spot flooding, drilling additional wells. Protection of the environment and subsoil. Choice of operational object. Modern magnification methods Development of an oil field with gas injection into reservoirs. Technology of reservoir pressure maintenance systems. Oil recovery of reservoirs, its limiting factors. Control of development of oil fields. Analysis of the development of oil fields. Regulation of the oil field development process, its goals and methods. Regulation of the oil field development process by lowering the bottomhole pressure, boosting fluid withdrawals, limiting the inflow of associated water, shutting down high-watered wells, shifting the injection front, leveling the inflow profiles (injectivity), using spot flooding, drilling additional wells. Protection of the environment and subsoil. Choice of operational object. Modern magnification methods

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Development results disciplines (module)	applies knowledge of basic production processes, representing a single chain of oil and gas technologies;
Labor intensity, cu.	4
Reporting forms (in including by semester)	Graded (grading)
List of basic and additional literature necessary for mastering the discipline	
Main literature	1. Livintsev P.N. Development of oil fields / P.N. Livintsev, V.F. Sizov. Stavropol, NCFU, 2014 2. Tagirov KM Exploitation of oil and gas wells. – M: 2012. -346 p. 3. Shchurov V.I. Technology and technology of oil production: Textbook for universities (ed: 3.) - M .: Alliance, 2010 - 510 p.

Additional literature	1. Ivanov S.I. Intensification of oil and gas flow to wells: Proc. Allowance. - M.: "Nedra-Business Center", 2006 - 565 p. 2. Suchkov B.M. Improving the productivity of marginal wells. - Izhevsk: UdmurtNIPIneft, 1999. - 550 p. 3. Mishchenko I. T. Well oil production. – M.: Ed. "Oil and Gas" Russian State University of Oil and Gas. I. M. Gubkina, 2003. 4. Reference book on oil production / V. V. Andreev, K. R. Urazakov, V. U. Dalimov and others; Ed. K. R. Urazakova. - M.: OOO "Nedra-Business Center", 2000. - 374 p.
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