

COURSE DESCRIPTION

Oil Pollution and Self-Cleaning

Credits. 5 ECTS, 180 academic hours

Objectives. The course “Oil Pollution and Self-Cleaning” is an optional special academic discipline intended to give students a richer understanding of oil pollution issues and provide them with information about its sources, impact on the ecosystems and self-cleaning processes. The Department of physical geography, ecology and environment protection of Southern Federal University has a unique experience of long-term observations of fates and effects of spilled oil in the fluvial, coastal and marine ecosystems in the framework of International Associated Laboratory found in 2011 jointly by the geographers of the Southern Federal University (Russia)

Structure of the discipline.

Module 1. Composition and properties of crude oil. Oil industry and oil products

Module 2. Sources of oil pollution and its impacts on the environment

Module 3. Regularities of oil pollution natural destruction and clean-up techniques

Learning outcomes. After completing the course, students will be able to demonstrate a fundamental knowledge of the petroleum composition, proprieties, and behaviour in the environment, to understand the regularities of oil pollution natural destruction, to interpret the results of its detection and identification by different methods, to compare and to choose the most rational methods of combating oil pollution.

and the University of Nantes (France). The results of field studies enrich the material of lectures and practical courses.

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