

OPERATION OF PETROLEUM- STORAGE DEPOTS

SUBJECT



**Leonid Y.
ZEMLEROB**

Associate Professor,
Pipeline Transport Department

WORKLOAD OF THE SUBJECT

144
hour

4 term

4
credits

exam

- Engineering geodesy
- Building construction



**LINKS WITH OTHER
SUBJECTS**



- Preparation of oil and gas for transportation
- Commodity transport and commodity accounting operations



WORKLOAD

CLASSROOM WORK

4 term

48
hour

Practical
classes

16 hour

Lectures

16 hour

Laboratory
work

16 hour



GOALS

- To provide general and special information about oil depots, gas stations and other oil storage facilities
- To give the principle points of their design and calculation
- To consider the operation methods of oil depots of various structures and to establish criteria of their optimum operation



TASKS

To consider the tasks related to optimizing the selection of schemes and the equipment for depots, combating the oil losses, hydraulic calculating of in-core pipelines and handling facilities, thermal calculations of distribution pipelines and tanks.



LECTURES

4 TERM

- Oil and oil products, the main properties of oil and oil products that must be taken into consideration during transportation and storage
- The classification of petroleum tank farms. Basic regulations for design, construction and operation of tanks and tank farms.
- Storage tanks for oil and oil products
- Equipment of tanks and tank farms
- Pumps in tank farms. Auxiliary systems and technological pipelines of oil depots.
- Operation of oil depots
- Operation of oil loading terminals
- Maintenance and repair of tanks



PRACTICAL CLASSES

4 TERM

- Physical properties of petroleum products
- The main tasks of designing oil depots
- Calculation of structural elements of steel tanks
- Tank equipment
- Loading-unloading operations of oil products
- Estimation of oil and oil products physical losses
- The operational life of steel tanks



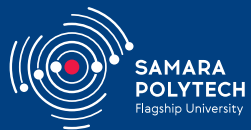
LABORATORY WORK

4 TERM

- Determination of oil viscosity on a rotary viscometer
- Determination of reflective and light-absorbing properties of coatings of metal tanks for storage of oil and oil products
- Automatic detection of the level of takeoff radar level gauge
- The work of the operator of the head oil pumping station



EQUIPMENT AND LABORATORIES





EQUIPMENT AND LABORATORIES

