Syllabus of discipline (selective, 192 Construction and civil engineering)

"Sanitary equipment of buildings"

Educational level – bachelor

Specialty "Building and Civil Engineering"

Language of teaching - Ukrainian, English

Subjects	**"Sanitary equipment of buildings"**	**Abbreviation**	**SEB**
Form classes	Lectures: 45 hours. Practical: 45 hours.	Semester	**6**
load volume	Classroom communication - 36 hours Independent study - 54 hours	Credits Hours	**3** **90**
Head of Department	Department of Construction, Geotechnics and Geomechanics - Professor SM Gapeev	DCGG	
Teachers who teach 	Maksymova Ella Aleksandrovna maksymova.e.o@nmu.one	Candidate of Geological and Mineralogical Sciences, Associate Professor of DCGG	
Course page in MOODLE NTU "DP":	**Course link** https://do.nmu.org.ua/course/view.php?id=3083		
Consultations Online consultations:	**according to a separate schedule agreed with the applicants for higher education** **e-mail or group in Teams (according to the schedule agreed with the applicants for higher education)**		

Previous knowledge	**Engineering geodesy: ability to work with geodetic instruments and use topographic materials for the design and construction of construction sites and engineering networks** **Technology and organization of construction production: have an idea of engineering networks in construction**
The purpose of studying the discipline	**Formation of competencies it is reasonable to make a choice and calculations of the basic sanitary systems and schemes of ventilation, gas supply, water supply and drainage of settlements and the industrial enterprises, and also to master principles of designing of sanitary networks of buildings and constructions of various function, for reliable and safe operation structures.**
Content and learning outcome	**Determine the parameters of the microclimate of buildings and structures. Design ventilation systems.** **Master the basics of designing gas supply systems for buildings and structures.** **Be able to assign water supply and drainage schemes. Make a choice of dead-end, ring, direct-flow and circulating water supply.** **To determine the parameters of main networks and the principles of their construction in different geomorphological conditions.** **Be able to design drainage systems of settlements.** **To define systems and schemes of drainage, arrangement of sewer networks and pumping stations.** **Perform basic hydraulic calculations. Choose the main methods and technological schemes of urban wastewater treatment and treatment**
Form classes	**Lectures and practical classes - multimedia materials, presentations, videos**
Form of control	**Successfully passed the theoretical exam.**
Literature	**1. Summary of lectures on the subject "Sanitary equipment of buildings" // Maksymova E on the website of the https://do.nmu.org.ua/course/view.php?id=3083** **2. DBN B.2.5.-74: 2013 “WATER SUPPLY: EXTERNAL NETWORKS AND STRUCTURES”. dbn_v_2_5_74_2013_vodopostachannja_zovnshn_merezh_ta_sporudi** **3. Orlov VO Water supply and drainage: Textbook / V.O. Orlov, Ya.A. Tugay, A.M. Orlova. - К.: Знання, 2011. - 359 с.** **4. Pavlinova II Water supply and drainage: a textbook for bachelors / II Pavlinova, V. V. Bazhenov, VR Gubiy. - 4th ed., Reworked. and action. - M: 2015. - 472 c. - Series: Bachelor. Basic course.** **5. Kedrov VS, Lovtsov EN Sanitary equipment of buildings. - M.:1989. - 495 c.** **6. Kravchenko VS, Girol MM, Matsneva TS Water supply and drainage: Textbook. - Rivne: NUVGP, 2007. - 432 p.** **7. Dobriansky IM, Dmitrov GM Water supply and drainage of buildings and structures: Textbook. - Lviv: Afisha, 2008. - 120 p.**