

Syllabus Form of Academic Discipline

№	Field name	Detailed content, comments
1.	Name of the faculty	Infocommunication
2.	The level of higher education	Bachelor's
3.	Code and title of specialty	152 Metrology and information measuring technics
4.	The type and title of the educational program	Technical expertise
5.	Code and title of the discipline	Technical electrodynamics
6.	Number of ECTS credits	5
7.	The structure of the course (distribution by type and hours of training)	semester control 30 h. – 15lc, 30 h. – 8 pr, 16 h. – 4 lb, 10 h. – 5 cons, 80 h. – independent work, credit
8.	Schedule (terms) of study of the subject	2-nd year, 3-d semester
9.	Prerequisites for learning the discipline	Before should know in the discipline Higher mathematics, Physics
10.	Abstract (content) of the discipline	1. Mathematical principles of electrodynamics 2. Base electrodynamics equations 3. Electromagnetic waves
11.	Competencies, knowledge, skills, understanding that a higher education acquirer has in the learning process	Know: the main characteristics of electromagnetic waves; parameters of electromagnetic waves in guiding structures; main types of transmission lines and their features; types of oscillations in bulk resonators, their parameters; principles of radiation parameters of electromagnetic waves; Have a mathematical apparatus of electrodynamics, skills in working with measuring devices in the microwave range; solve the problem of finding the basic parameters of electromagnetic waves that propagate in the guide structures; solve problems of finding the parameters of electromagnetic oscillations in bulk resonators of rectangular and cylindrical shapes.
12.	Learning outcomes of a Higher Education applicant	Ability to demonstrate knowledge and understanding of the basics of electromagnetic field theory.
13.	Assessment system in accordance with each task for taking tests/exams	1. Perform 6 pz. Work 4 lbs. 3. Compose 2 tests. 4. Get at least 60 points per semester. 5. Get credit. Grade for the semester: $P_{II} = \frac{\frac{25}{6}lc + \frac{25}{3}pz + \frac{25}{3}lb + (T_1 + T_2 + T_3)/3}{4}$

		= (60-100) points.
14.	The quality of the educational process	The policy of academic integrity (http://lib.nure.ua/plagiat), updating the content of the discipline on the basis of modern practices in 2019.
15.	Methodological support	<p>1. Complex of Scientific and Methodological Support "Technical electrodynamics" to Bachelors for speciality 152 «Metrology and information measuring technics» [Electron resource] / KhNURE; O.M.Nikitenko. – Kharkiv, 2018. – 307 p. http://catalogue.nure.ua/knmz.</p> <p>2. Nikolski V.V. Electromagnetic field theory Moscow : Higher school, 1961– 372 p.</p> <p>3. Nikolski V.V. Electrodynamics and radiowaves' propagation Moscow : Science, 1978. — 544 p.</p> <p>4. Falkovski, O.S. Technical electrodynamics M.: Svjaz, 1978. – 432p.</p> <p>5. Halper L.G., Laba O.A. Methodological materials to laboratory works for discipline “Electrodynamics and radiowave propagation” for speciality «Radiotechnics». Khmel'nitski: NDU, 2004. – 89 p.</p> <p>6. Shcherbina O.O. Methodological materials topractical “Electrodynamics principles” KhNURE; Kharkiv, 2008. – 44 p.; 2009. – 40 p</p>
16.	The developer of the Syllabus	O. M. Nikitenko, Ass. prof. Metrology and Technical expertise Department, PhD E-mail: nikonxipe@gmail.com

Note.

The Syllabus is a document explaining the mutual responsibility of the teacher and the student. It presents procedures (including deadlines and evaluation principles), policies (including academic integrity policies) and the content of the discipline, as well as a calendar for its implementation. The measured goals that the teacher sets before his discipline should be stated in the Syllabus. The student must understand what he/she will be able to learn, what this course may be useful for. The Syllabus outlines the conceptual transition from "knowledge acquisition" and "practical skills" to competencies that a student can learn while studying this course. The Syllabus includes the course summary, purpose (competences), list of themes, reading materials, rules for passing missed classes. Unlike the work program and the educational and methodological complex of the discipline, The Syllabus is created for the student.