The syllabus of the discipline
Basics of Web design

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Field name	Detailed content, comments
Name of the faculty	Faculty of Infocommunications
Level of higher education	First (bachelor's)
Code and name of the specialty	172 Telecommunications and radio engineering
Type and name of educational program	EPP "Information and Network Engineering"
Name of the discipline	Basics of Web design
Number of ECTS credits	4
Discipline structure (distribution by types and hours of study)	24 hours - 12 lectures, 8 hours - 4 practical classes, 16 hours - 4 laboratory classes, 8 hours - 4 consultations, 64 hours - homework, **type of control**: credit
Schedule (terms) of studying the discipline	3rd year, V semester
Prerequisites for studying the discipline	Basic concepts of: 1. Web programming 2. Information systems and Internet technologies Know: general principles of client-server interaction; web page architecture; theory, principles and features of the web browser; basics of html-layout and css.
Competences, knowledge, skills, understanding, which is acquired by the applicant in higher education in the learning process	The discipline is used for formation the following competencies: Knowledge of theories and methods of basic and general engineering sciences to the extent necessary to solve specialized problems and practical problems in the field of professional activity; PRN3. Ability to apply knowledge in the field of informatics and modern information technologies, computer and microprocessor technology and programming, software for solving specialized problems and practical problems in the field of professional activity; PRN4. Ability to participate in the creation of application software for elements (modules, blocks, nodes) of telecommunication systems, infocommunication, telecommunication networks, radio systems and television and radio broadcasting systems, etc.; PRN5. Ability to calculate elements of telecommunication systems, infocommunication and telecommunication networks, radio systems and television and radio broadcasting systems, according to the terms of reference in accordance with international standards, with using design automation tools, including created independently; PRN8. Ability to apply modern achievements in the field of professional activity in order to build

	advanced telecommunication systems, infocommunication, telecommunication networks, radio systems and television and radio broadcasting systems, etc.; PRN10. Ability to test telecommunication systems, infocommunication, telecommunication networks, radio systems and television and radio broadcasting in accordance with technical regulations and other normative documents.
The quality of the educational process	Educational-methodical and material-technical resource provision of the educational program, within the framework of which the discipline is studied, meets the licensing requirements and accreditation conditions of the educational activity of the university. Annual monitoring and revision of the curriculum of the discipline in accordance with the requirements and recommendations of the Ministry of Education and Science, state certification of acquired competencies of graduates, standards of cooperation with employers to ensure a competitive level of training. Adherence to the principles of academic integrity (https://lib.nure.ua/plagiat). Contains public information on the requirements, competencies, level of education within the current educational program.

Description and content of the discipline

The purpose of the discipline is to acquire theoretical knowledge and practical skills to create a general and detailed design of web resources of different types, namely - the cycle of development of the visual part of the site and its placement on the server; acquaintance of students with features of construction of internal structure of a site, both at the level of a server part, and at the level of static pages; study of basic methods of ensuring high competitiveness of created web resources in an aggressive web environment; mastering the skills of creating effective textual content, web graphics, gaining knowledge on creating the design and content of the site with the possibility of further search engine optimization.

The discipline contributes to the formation of competencies that allow in the process of developing the structure of the site and its individual pages to develop technical tasks for further layout of individual documents and the creation of appropriate functions at the server part of the site; have techniques for analyzing the effectiveness of existing projects; develop code and graphic parts of the designed pages; create graphic content.

Content

Content module 1. Basics of WEB design.
Topic 1. Introduction to WEB design. Stages of site development.
Topic 2. Basic techniques and capabilities of Adobe Photoshop. Adobe Illustrator Basics.
Content module 2. Basic theories of WEB design.
Topic 1. Font theory and typography.
Topic 2. Theory of color. Sources of graphic objects.
Topic 3. 3 Graphic files and formats. Features of their use.
Content module 3. Graphics in WEB design and existing trends
Topic 1. Approaches to creating a web resource design. Existing trends.

Topic 2. Graphic design. Infographics.
Topic 3. Principles of plot illustration. Basics vector illustration.
Content module 4. Tools for customizing the design and content of site pages
Topic 1. Visual objects associated with web resources. Corporate identity.
Topic 2. Elements of seo-strategy at the design stage. ARI.
Topic 3. CMS Review. CMS WordPress.

Learning outcomes of higher education

As a result of studying the discipline, students must:

know: the basics of visual culture in creating web and related resources; theoretical bases of construction of competitive web resources; existing web design trends; features of creating graphic content; principles and features of ARI use; basics of working with content management systems;

be able to: create your own and edit third-party graphic content of various types using Adobe Photoshop and Adobe Illustrator; design complete website templates; develop schemes of effective content for the site; create strategies to promote the website; use CMS.

Assessment system according to each task for passing the test / exam

To assess the work of a student during the semester, the final rating score Q_{sem} is calculated as the sum of marks for different types of classes and control activities.

Type of lesson / control measure	Rating
Lb № 1, 2	$(12…20)×2 = 18…40$
Checkpoint **1**	**24…40**
Lb № 3, 4	$(12…20)×2 = 24…40$
Control testing 1	12…20
Checkpoint **2**	**36…60**
Всього за 2-й семестр	60…100

Qualitative evaluation criteria in the national scale and ECTS

Satisfactory, D, E (60-74). Show the required minimum of theoretical knowledge. Know the ways and methods of solving practical problems and be able to use them in practice.

Well, C (75-89). Firmly know a minimum of theoretical knowledge. Demonstrate the ability to solve a practical problem and justify all stages of the proposed solution.

Excellent, A, B (90-100). Show complete knowledge of basic and additional theoretical material. Unmistakably solve a practical problem, explain and justify the chosen method of solution.

Assessment scale: national and ECTS

The sum of points for all types of educational activities	ECTS assessment	Score on a national scale	
		for exam, course project (work), practice	for offset
90 – 100	**A**	perfectly	credited
82-89	**B**	fine	
74-81	**C**		
64-73	**D**	satisfactorily	
60-63	**E**		
35-59	**FX**	unsatisfactory with the possibility of reassembly	not credited with the possibility of re-assembly
0-34	**F**	unsatisfactory with mandatory re-examination	not credited with compulsory re-study of the discipline

Methodical support

Basic literature
1.Nilsen Iakob. Veb-dyzain – Zruchnist vykorystannia veb-saitiv. — Kyiv.: TOV V.D. Viliams, 2009. — 368 s.
2.Syrykh, Yu Sovremennyi veb-dyzain. Эрokha Veb 3.0. 2-e yzd. - M.: 000 "Y.D. Vyliams" 2013. - 368 s.
3.Pasichnyk O. H., Pasichnyk O. V., Stetsenko I. V. Osnovy veb-dyzainu / O. H. Pasichnyk, O. V. Pasichnyk, I. V. Stetsenko : [Navch. posib.]. — K.: Vyd. hrupa BHV. — 2009. — 336 s.

Supporting literature
1. Skott Kelby, Felyks Nelson. Photoshop CS. Sovety znatokov – M.: "Y.D. Vyliams", 2005. - 246 s.

Methodical instructions for different types of classes
1. Konspekt lektsii z kursu «Osnovy web-dyzainu» dlia studentiv usikh form navchannia napriamu 6.050903 – Telekomunikatsii " –Kh.: KhNURE, 2017 Elektronnyi variant.
2. Metodychni vkazivky do samostiinoi roboty z dystsypliny «Osnovy web- dyzainu» dlia studentiv usikh form navchannia napriamu 6.050903 – Telekomunikatsii Kh.: KhNURE, 2017 Elektronnyi variant.
3. Metodychni vkazivky do laboratornykh robit z dystsypliny «Osnovy web- dyzainu» dlia studentiv usikh form navchannia napriamu 6.050903 – Telekomunikatsii Kh.: KhNURE, 2017.

Information support
1. Paket prohram Axure
2. Adobe Photoshop
3. Adobe Illustrator
4. CMS Wordpress