COURSE DESCRIPTION CARD							
The name of the course/module THEORY AND PRINCIPLES DESIGNING HOUSING ARCHITECTURE (1) ARCHITECTURAL DESIGN OF HOUSES 1					Code A_K_1.3_002		
Main field of study					Educational profile (general academic, practical)	Year / term	
Specjalization				Language of course:	Course (core, elective)		
Houro			-		FUIISII	COLE	
Lectures: 30 Classes: - Laboratory - Projects / seminars: 45					1+7=8		
Level of qualification: (full-time studies)		Form of s (full-time s studies)	studies Educational area		s)	ECTS distribution (number and %)	
I Full-		Full-ti and s	ime studies I part-time studies		iences	8 100%	
Courses	status in the s	tudies' prog dire	gram (basic, directiona ectional	I, other)	(general academic, from a differer	nt major)	
Leo	cturer res	ponsib	le for course:		Lecturer:		
dr hab. inż. arch. Radosław Barekdr hab. inż. arch. Maciej Janowskie-mail: radoslaw.barek@put.poznan.ple-mail: maciej.janowski@put.poznan.plFaculty of ArchitectureFaculty of Architectureul. Nieszawska 13A, 61-021 Poznańul. Nieszawska 13A, 61-021 Poznańtel. 61 665 33 05tel. 61 665 33 05				anowski ut.poznan.pl 1 Poznań			
2	Knowle Skills:	dge:	 In terms of knowledge, skills, social competences: student has basic knowledge of art, architecture and urban planning, student knows the basic methods, techniques, tools and materials used at solving engineering tasks of architecture and urban planning student has basic knowledge of the fields of study related to his/her field of study, student has explicit, theoretically based knowledge including the key issues of designing residential architecture, student has detailed knowledge of technical building drawing necessary to presentation of architectural conceptions, student has knowledge of development trends and most important and latest achievements in designing residential environment of people, student has knowledge required for the understanding of social, economic and legal determinants of designing the residential space for people. student can use the techniques of manual drawing and architectural drawing 				
2	JKIIIS:		 necessary in chiaroscuro student can other proper information a opinions student can of tasks of d student can environment student can designing a student can engineering student can engineering 	in the process of in perspective of acquire information ly selected sour- and interpret the use IT technique esigning an arch n communicate and in other en prepare a well-of small and middle self-education s use IT technique activities, use the technique tectural form on	bi designing, can present r axonometry with marked tion from field specific litera ces in Polish and English, c m, draw conclusions as we es, including artistic means hitectural composition, using different technique vironments, locumented elaborations on e types of residential housing kills, es respectively to the perforues ues of manual drawing in t a small scale, and on the local	the designed block with context of place, iture, data bases and can integrate the acquired ell as voice and justify s, typical for the execution ues in the professional in issues related to ng, rmance of tasks typical for he process of designing a basis of the said drawings	

3	Social competences:	 can come up with interpretations and draw conclusions, student can carry out critical analysis of the manner of operati existing solutions, systems and processes related to desig residential building, student can identify a design problem and on the basis the specification of practical tasks in the scope of conceptual proje family house, understanding of the need to broaden the competences, readin together in a group, student understands the need for lifelong learning; can inspire process of learning other people, student is aware of the importance of non-technical aspeending activities in this impact upon the environment. 	ion and assess the in of single family reof, can draw up ect of middle single ness to work and organize cts and effects of nt and liability for		
		environment affecting decisions,			
		 student can work and cooperate in the group, assuming a number of difference roles therein, student correctly identifies and reactives dilemmes related to the correct 			
		 student correctly identifies and resolves offernings related application of existing legislation and administrative procedure student can think and act in entrepreneurial, creative and innov the scope of seeking the means of expression during preparatiarchitectural concept and acquiring the materials useful to real 	s, vative manner in ion the ization of them.		
Objec	tive of the course	– LECTURES:			
	presentation of i	ssues related to designing human residential environment of low or vpes of single family housing	medium intensity,		
	development of	the ability to analyze of place in the urban planning and architectura	l scale,		
	 presentation of typology of detached house, application of known functional schemes in different configurations, development of the ability to simultaneous designing the views and block of building, development of the ability to graphic presentation of architectural conception (views, sections and 				
:	 development of the ability to manual drawing giving facilities for solutions differentiation, development of the ability to building models (working and target models), improving the knowledge and ability to preparation of conceptual drawings (views, sections and facades) based on building knowledge. 				
Objec	tive of the course	- DESIGN CLASSES:	modium intonoitu		
	presentation of t	ssues related to designing numan residential environment of low or ypes of single family housing,			
-	development of presentation of t	the ability to analyze of place in the urban planning and architectura ypology of detached house,	l scale,		
	 application of known functional schemes in different configurations, development of the ability to simultaneous designing the views and block of building 				
•	development of the ability to graphic presentation of architectural conception (views, sections and facades).				
	development of the ability to manual drawing giving facilities for solutions differentiation, development of the ability to building models (working and target models), improving the knowledge and ability to preparation of conceptual drawings (views, sections and facades) based on building knowledge.				
Know	ledge:				
W01	student has ex has detailed designing	plicit, theoretically based knowledge including the key issues and knowledge of selected issues of the theory of architectural	AU1_W01		
W02	student has kr designing resi	owledge in the scope of housing, knows the principles of dential architecture	AU1_W15		
Skills					
U01	student can pr documented e	epare and present oral presentations as well as a well- laborations on issues related to architecture and urban planning	AU1_U03		
U02	student can m and experimer their basis, no	student can make spatial models (mock-ups) allowing for carrying out simulation and experiments with the use of a variety of materials, in this can perceive on their basis, non-technical aspects such as perception processes among othersAU1_U08			
U03	student can us architectural ic	e various technical and material means for the presentation of an lea	AU1_U27		
Socia	l competences:				

K01	student understands the need of continuous self-education - improvement of professional, personal and social competences	AU1_K03		
K02	student is aware of the social and humanistic aspects of the architect's work - a profession of public trust	AU1_K09		
	The evaluation methods:			
<u>The evaluation methods - lectures:</u> A series of lectures of "Theory And Principles Designing Housing Architecture 1" ends with the exam. The basis for participation in exam is credit of classes within the learning module. The condition of credit is to obtain a positive assessment of the final exam. <u>The evaluation methods - classes:</u> Individual consultations with the teacher, current assessment of design works progress.				
Partial re course is Final rev	eviews summarize subsequent stages of implementation of design task. The conditio s obtain a positive assessment for partial reviews (formative assesment). view at the last classes – projects exhibition and the commission assessment of proje	n of credit the ects by 3 teachers.		
Prerequ	uisites for credit and evaluation method of project. The following elements are e	evaluated:		
a) comp b) the gi	eteness of work in analytic, design and descriptive part, graphic quality of project, uality of design solutions			
c) the de	egree of connection of designed building with surrounding,			
d) relation	ons between public space, semi-public and private space,			
e) realiza	ation of psychophysical and social needs of the residents,			
 i) innova d) correct 	ation of formal and functional solutions,			
h) aesth	etics and readability of graphic and descriptive part and model			
Final gra	ading scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0			
	Course contents			
Lecture	<u>95:</u>			
Course	of "Theory And Principles Designing Housing Architecture (1)" covers a series of lect	ures:		
Lecture	e no. 1			
	design a good apartment	ant and anoaifian		
of cond	iure introducing to issues related to design of nousing, issues of residential environm	ent and specifics		
lecture	a no. 2			
Function The lect house it of curre	ons of apartment – and technical specifications ture develops and details the issues related to basic functions, which should be fulfille in the light of knowledge about forming the functions, ergonomics, social relations etc. ant building legislation and technical specifications, which should be fulfilled the buildi	ed by apartment, . and in the context nas and their		
location	n. 1.	.g		
Lecture	e no. 3			
The arc	chitecture of detached houses			
During t the follo possibil Lecture	the lecture are presented conditions related with designing the detached house. Ther owing issues: family model and adoption to individual needs of residents, types of buil lities and restrictions related with them, the utilities, functions of particular spaces. a no. 4	e are presented lding development,		
The res	sidential environment			
During t spatial, as in the	the lecture are presented issues consisting on concept of "residential environment" in functional and infrastructural components in apartment, apartment building and its er e urban planning context.	cluding social, nvironment, as well		
Lecture	e no. 5			
The ho	using architecture in multifamily building			
During t are pres housing comple.	the lecture are presented conditions related to designing the apartments in multifamil sented the following issues: the impact of demography on housing policy, norms and g, programmatic features of apartments and buildings and designing the environment xes of multifamily building.	y building. There standards of of buildings and		
Lecture	e no. 6			
The arc	chitecture of energy-efficient houses			
During t architec	the lecture are presented the basic issues related to energy saving in the building pro cture and conditions of designing the houses in energy-efficient and passive standard	cess of housing I.		
	tions and reconstructions			
During t (industr adaptat	the lecture are presented the adaptations of facilities with primal function different tha rial, military function) to housing functions (e.g. lofts) and reconstructions of existing a tion their functional layout to current housing needs.	n residential partment and		
	e no. ð elter			
me sne				

During the lecture are presented the examples of solutions, which providing the basic elements to protect human from adverse external conditions and provide minimum to living under certain conditions. **Lecture no. 9**

House, apartment and Vernacular and neo-Vernacular architecture

During the lecture are presented: form, function in the Vernacular housing architecture and local materials and ecological aspects related to their use. Also are presented the possibilities of contemporary use of neo-Vernacular ideas in housing architecture.

Lecture no. 10

The architecture of residential environment designing with support of public funds

During lecture are presented the issues of experiences related to designing the residential environment created with support of public funds.

Lecture no. 11

Social housing

Criteria and features of distinguish in the context of sustainable development idea.

Lecture no. 12

The examples of creative designing the housing architecture

Adoption of building to features of place identity. The camouflaged houses.

Lecture no. 13

The principles of designing housing architecture (1). Summary and evaluation.

During the lecture will be summed the series of lectures and will be carried out the evaluation of assimilation process of information from lectures, including the assessment of value of absorption level of issues presented in the scope of theory and principles of designing the housing architecture (1).

Classes:

Conceptual project of any type of detached house on the given parcel/parcels for residents with individuality selected by student.

Analytical part:

- the analysis of initial materials (basic maps, air and satellite photos), autopsy vision of terrain documented by sketches, drawings and photos,
- the analyses in the urban planning and architectural scale: structures of building, greenery,
- communication, altitude analysis, valorization analysis and insolation,
- critical analysis of Master Plan and administrative decisions concerning terms of construction and land management
- conclusions, design guidance determine the profile of residents,
- current scale: 1:500.

Design part:

Individual project work:

- context: inclusion of block into environment, public-private relations, interior exterior,
- function: the implementation of primitive and derivative needs of users compatible with their individuality,
- form: forming the complex human living environment, of which expression corresponds to the individual needs of residents and realizes need of social dialogue in the same time.

Required elements of project: drawing and photographic cataloguing, analytic part, the project of parcel development, views of all storeys, sections (minimum 2), facades with emphasis the used materials and coloring, perspectives: internal and external, descriptive part: the superficial and capacity indicators, surfaces statement, urban planning model (with surrounding in the scale 1:500), architectural model (with parcel 1:100).

Basic bibliography:

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- Adamczewska-Wejchert H., Domy atrialne, Arkady, Warszawa
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- Dąbrowska Milewska G., Zabudowa mieszkaniowa w kształtowaniu przestrzeni miasta.
- Grandjean Etienne Ergonomia mieszkania
- Korzeniewski W.(1989) Budownictwo mieszkaniowe poradnik projektanta, Arkady, Warszawa1989
- Korzeniewski W. (2011) Projektowanie mieszkań, Wydawnictwo POLCEN, Warszawa 2011
- Korzeniewski W. Warunki techniczne dla budynków i ich usytuowanie-poradnik z komentarzem,
- (wydanie 8 i pozniejsze) PolCen , Warszawa 2009.
- Pallado J., Architektura wielorodzinnych domów dostępnych.
- Rozbicka M., Małe mieszkanie z ogrodem w tle, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2007.
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- Peters P., Rosner R. Małe zespoły mieszkaniowe , Arkady, Warszawa.
- Włodarczyk J.A. Żyć znaczy mieszkać, PWN, warszawa-Kraków 1997

•	ROZPORZĄDZENIE MINISTRA INFRAST w sprawie warunków technicznych, jakim (Dz.U.Nr75,poz.690 z późniejszymi. zmianami.) Ustawa z dnia 7 lipca 1994 r. Prawo budowlane. Rozporządzenie Ministra Infrastruktury z dnia 12 kw powinny odpowiadać budynki i ich usytuowanie. Bell Jonathan, 21 st Century House, wyd. Laurence Chueca Pilar, Today's city houses, wyd. Structure, Davies Colin, Key houses of the twentieth century, Melhuish Clare, Modern house 2, wyd. Phaidon, Lo Neufert E., Podręcznik projektowania architekton wydania	RUKTURY z dnia powinny odpowiadać bud wietnia 2002 r. w sprawie wa King, Londyn, 2006. Barcelona, 2006. wyd. Laurence King Publish ondyn, 2000. iczno-budowlanego, Arkady	12 kwietnia 2002r dynki i ich usytuowanie nrunków technicznych, jakim ing, Londyn, 2006. v, Warszawa 1980 + nowe		
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The student workload					
	Form of activity	Hours	ECTS		
Ove	rall expenditure	210	8		
Classes requiring an individual contact with teacher		84	3		

Balance the workload of the average student

Form of activity	Number of hours
participation in lectures	30 h
participation in classes/ laboratory classes (projects)	45 h
preparation for classes/ laboratory classes	13 x 6 h = 78 h
preparation to colloquium/final review	24 h
participation in consultation related to realization of learning process	7 x 1 h = 7 h
preparation to the exam	24 h = 24 h
attendance at exam	2 h

126

Overall expenditure of student:

Practical classes

8 ECTS credits

210 h

As part of this specified student workload:

activities that require direct participation of teachers:
 30 h + 45 h + 7 h + 2 h = 84 h

3 ECTS credits

5