UNIVERSITY OF BELGRADE
TEACHER EDUCATION FACULTY

DOCTORAL ACADEMIC STUDIES
DOCTOR OF PRIMARY CLASS TEACHING METHODOLOGY

CODE:	COURSE	Sem.	Course Status (compulsory/elective)	Tuition (classes)	Individual Research	ECTS
ДМН01	**General scientific method**	**I**	**C**	**8**	**6**	**10**
Course content The coursework consists of two units. The first one relates to the general methodology content and philosophy of science; and the second one to the social sciences methodology. Relation between philosophy and special sciences through history; problems of the fundamental learning methods, the nature and structure of scientific explanations; concept and theory of the truth. The problem of definition and testing of scientific hypotheses; problems of scientific knowledge progress; the concept of the scientific revolutions and scientific discoveries; the concept of scientific theories and scientific law; specificities of research and methods in natural sciences. General characteristics of the methodology in sociology field; scientific methods and scientific research methods; the problem of values in social sciences; positivistic approach on the sociological methodology (Comte, Mill, Durkheim); basic viewpoints on fundamental differences in methodologies between social and natural sciences (Dilthey, Windelband and H. Rickert); possibilities and limitations of methodological autonomy in social sciences; the concept and specifications of the social determinism; contemporary streams in the methodology of sociology.					
ДМН02	**Introduction to scientific research**	**I**	**C**	**8**	**6**	**10**
Course content The problems for study and theme formulation for doctoral dissertation in the primary school teaching methodology. Work out and evaluation of a scientific-research project in the primary school teaching methodology. Collection and processing of data. Research results interpretation in the primary school teaching methodology. Scientific work writing process in the primary school teaching methodology.						
ДМН03	**Theoretical and methodological problems in primary school teaching methodology**	**I**	**C**	**7**	**6**	**10**
Course content Primary school teaching methodology specificities. Contemporary trends in the primary school teaching methodology. Didactic-methodological foundation of the primary school methodology. Fundamental epistemological and methodological orientations in the primary school methodology. Pedagogic and teleological understanding of teaching in the younger classes of the elementary school. The knowledge system in the primary school teaching. Didactic syncretism. Understanding of the primary school teaching in the contest of contemporary didactic theories and learning theories. Qualitative and quantitative research in the primary school teaching methodology. Science and pedagogy of the content in the younger classes of the elementary school.						
	Tuition classes per week in semester I			**23**	**18**	
	Total number of tuition classes per week in semester I			**41**		

ДМНИ1	**Elective Courses / Block I – Specialized elective course**	**II**	**ECB**	**6**	**12**	**30**
	Sentence syntax – methodological aspects		E	3	6	15
	Course content					

	Traditional and modern approaches of the sentence in the syntax of Serbian language. Constituents of the sentence in traditional and modern syntax. Independent sentences in traditional and modern Serbian syntax. Sentences in a text. Textual cohesion concept. Traditional and modern morphology. Meaning of the sentence. Sentence in the pragmatic perspective. Language games.					
	Literary work interpretation – methodological aspects		E	3	6	15
	Course content**:** I Literature and its interpretation. Literature study methodology. External approach to the literature. Literary work and its genesis: biographical, sociological and psychological interpretations. Internal approach. Literature work and its structure: the work as creation of language and art. Concept and determination of a literary text. Historicity of a literary work and its timeless values. Evolution and question of literary-historical process laws. Problem of evaluation. II Tradition in the literature studies: Theoretical, historical and philological studies of the literature from the ancient age to 18 century. The new approach toward literature in the 18 century: historical relativism, concepts of the time spirit and people spirit. Literary-historical positivism: the most important concept of the literary study in 19 century. Changes in the methodology of science of literature by the end of 19 and beginning of 20 centuries: The positivism crisis and anti-historicism in the study of literature. Resistance to dogmatism of the external approach. Spiritual-historical approach by Wilhelm Dilthey. Saussure`s teaching and contribution of linguistics to literature study. Russian formalism, its significance and influence. Anglo-Saxon new critique. Teaching of interpretation. Phenomenological approach to literature: Ingarden`s phenomenological model of the literary work (Teaching on stratigraphy of literary work). Structuralism. Semiotic study of literature. Theory of perception and emphasizing the role of readers. III Literature and literary (cultural) tradition: Genesis and tradition, analogies and coincidences. Text and context (National and worlds literature as possible context). Literature and culture.					
	Contemporary views on the social development and historical processes		E	3	6	15
	Course content Modern society characteristics. Specificities of our epoch. Historical understanding of the phenomenon of the society and the state: Characteristics and tendencies. About one understanding and equalizing of egalitarianism and globalism. Socialism as theoretical movement. Civilization values of socialism and its historical contradictories. Concept of transition: Nature of post-socialistic societies, its typology and mythology of developmental strategies. Europeanization and globalization. Neoliberalism, globalism and Americanism of the world. Globalization of democracy and democratization of globalization. Contemporary society in changes (End of the myth of omnipotence of the state or searching some third way).					
	Contemporary views on the natural environment		E	3	6	15
	Course content Living and non-living natural environment – diversity, unity and conditionality. Modern man and environment. Relation of man toward other living creatures and non-living natural environment. Modern understanding of the environment and religion; actual theories in regard with structures, interactions and systems on different levels in the natural environment; functioning of physical, chemical and biological experimental systems for measuring different parameters and acquiring insights about the natural environment. Problems of energy on the Earth. Consequences of excess or shortage of some kinds of energy to the environment. Contemporary science and new (bio) technologies for 21st century. Prevention and possibilities of more efficient solutions of problems occurred under negative influence of modern man to the environment.					
	Basic theoretical and methodological principles of teaching algebra		E	3	6	15
	Course content *Theoretical teaching* Mathematic language. Basic concepts in algebra. Algebraic operations and its features. Algebraic structures (group, circle, field …). Homomorphism of algebraic structures. Numbers: Natural, whole, rational, real, and complex numbers. Mathematical induction, divisibility, factorization, base numbers and geometric interpretation of numbers. Equations and non-equations with one unknown. Polynomials. Bezout`s position, Viete`s connections, the basic position of algebra. Elements of linear algebra. Basic elements of combinatorics and statistics. Methodical approach to algebraic contents in the initial teaching mathematics.					
	Basic theoretical and methodological principles of teaching geometry		E	3	6	15
	Course content *Theoretical teaching* Basic topological concepts. Pre-Euclidean geometry. Thales. Pythagoras. Hippocrates. Plato….Planimetry and sterometry. Basic geometrical figures in the plain, its features and mutual relations. Basic geometrical bodies in the space, its features and mutual relations. Construction by ruler and caliper. Axiomatic foundation of the geometry. Euclidean system of axioms. Hilbert`s system of axioms. … Non-Euclidean geometries. Isometric transformations of the plain and space. Measuring in geometry.					
				Tuition classes per week in semester II	**6**	**12**
				Total number of tuition classes per week in semester II	**18**	

Average tuition classes per week per year	**14.5**	**15**	
Total number of tuition classes per week per year	**29.5**		

ДМНИ2	**Elective Courses / Block II– Teaching Methodology elective course**	**III**	**ECB**	**4**	**16**	**30**
	Modern trends in primary school Serbian language teaching methodology		E	2	8	15
	Course content Language science and teaching science. Grammar as the subject of teaching work. Immanent grammar, didactic (school) and scientific grammar. Traditional and modern forms and methods of language teaching. Linguistic theories of language teaching. Contemporary linguistic views on language studies in school. Connectivity of language study with literature. Exercising in language teaching. Multimedia approach in initial teaching reading and writing. Linguistic fundamentals of speech culture in pupils. Introduction in bi-linguistic methods.					
	Modern trends in primary school literature teaching methodology		E	2	8	15
	Course content Methodical interpretation of a literary text. Relation between literary-theoretical and methodical study of literary work. Adoption of literary-theoretical concepts in teaching. Methodical approach to literary works (with some examples). Theory of reception in teaching literature in younger elementary school classes. Inter-textual approach to literary work in primary class teaching. Problem teaching of literature in younger elementary school classes.					
	Integrated Social, Environmental and Scientific Education teaching		E	2	8	15
	Course contents: Subject-methodological characteristics of methodology in integrative teaching of the nature and society. Contemporary trends in integrative teaching of the nature and society. Didactic-methodological foundation of integrative methodology of the nature and society teaching. Teleological understanding of integrative teaching in younger elementary school classes. Knowledge system in integrative teaching. Understanding of integrative nature and society teaching in context of modern didactic theories. Basic epistemological-methodological orientations in integrative methodology of nature and society teaching. Qualitative and quantitative research in integrative methodology of teaching. Integrative educational technology in teaching the nature and society.					
	Modern trends in Social, Environmental and Scientific Education teaching methodology		E	2	8	15
	Course content Interdisciplinary approach in natural and social sciences in the social, environmental and scientific teaching. Contemporary understanding of taxonomy aims in the social, environmental and scientific teaching. Social, environmental and scientific teaching content theories of choice. Contemporary tendencies of work evaluations in teaching the society, environment and science. Qualitative and other explorations in methodology of teaching the society, environment and science.					
	Modern trends in algebra teaching methodology		E	2	8	15
	Course content *Theoretical teaching* Historical development of methodological approach in processing algebraic contents. Aims and curriculum of mathematic (algebra) in the elementary school. Theory of knowledge development about basic concepts in algebra (number, variable, equation …). Methodological transformation of algebraic contents. Contemporary learning and teaching theories effects to methodological transformation of algebraic contents in primary class teaching and their coordination with pupils` abilities. Contemporary theories in algebra teaching (constructivism, theory of representation). Study, making and experimental examination of developmental model of algebraic knowledge. Study, development and experimental examination of didactic systems in primary class on algebraic contents. *Research work* Study analysis of scientific and research works in the field of algebra teaching methodology.					
	Modern trends in geometry teaching methodology		E	2	8	15
	Course content *Theoretical teaching* Historical development of methodology approaches in processing of geometric contents. Aims and curriculum of mathematic (geometry) in the elementary school. Theory of perception development and knowledge of geometry. Contemporary theories in teaching geometry. Contemporary learning and teaching theories effects to methodological transformation of geometric contents. Study, development and experimental examination of didactic systems. *Research work* Study analysis of scientific and research works in the field of algebra teaching methodology.					

				Tuition classes per week in semester III	**4**	**16**
				Total number of tuition classes per week in semester III	**20**	

ДМНИ3	**Elective Courses / Block III – Doctoral Thesis Project Preparation**	**IV**	**ECB**	**2**	**18**	**30**
	Preparation and evaluation of the Doctoral Thesis Project in the field of primary school Serbian language and literature teaching methodology		E	2	18	30
	Course content Selection of study problems in language and literature teaching field and theme formulation for doctoral dissertation. Theoretical and methodological explanation of theme. Establishing and explanation of aims, tasks and hypotheses for study. Selection and explanation of methods, techniques and samples of research work.					
	Preparation and evaluation of the Doctoral Thesis Project in the field of primary school Social, Environmental and Scientific Education teaching methodology		E	2	18	30
	Course content Selection of study problems in teaching society, environment and science and theme formulation for doctoral dissertation. Theoretical and methodological explanation of theme. Establishing and explanation of aims, tasks and hypotheses for study. Selection and explanation of methods, techniques and samples of research work.					
	Preparation and evaluation of the Doctoral Thesis Project in the field of primary school Mathematics teaching methodology		E	2	18	30
	Course content Selection of study problems in mathematic teaching field and theme formulation for doctoral dissertation. Theoretical and methodological explanation of theme. Establishing and explanation of aims, tasks and hypotheses for study. Selection and explanation of methods, techniques and samples of research work.					
				Tuition classes per week in semester IV	**2**	**18**
				Total number of tuition classes per week in semester IV	**20**	
				Average tuition classes per week per year	**3**	**17**
				Total number of tuition classes per week per year	**20**	

ДМН21	**Doctoral Thesis Preparation**	**V, VI**	**C**	**0**	**20**	**60**
	Preparation of the Doctoral Thesis in the field of primary school Serbian language and literature teaching methodology		**C**	0	20	60
	Preparation of the Doctoral Thesis in the field of primary school Social, Environmental and Scientific Education teaching methodology		**C**	0	20	60
	Preparation of the Doctoral Thesis in the field of primary school Mathematics teaching methodology		**C**	0	20	60
				Tuition classes per week in semesters V and VI	**0**	**20**
				Total number of tuition classes per week in semesters V and VI	**20**	
				Average tuition classes per week per year	**0**	**20**
				Total number of tuition classes per week per year	**20**	