

**Specification of subjects in the doctoral studies study program
Doctoral academic studies - Architecture and urbanism**



OBLIGATORY COURSES

Name of the subject: CONTEMPORARY CONTEXT OF ARCHITECTURE, URBANISM AND CONSTRUCTION		
Teacher(s): Vladan A. Djokić, PhD, Full Professor		
Status of the subject: Obligatory		
Number of ECTS points: 8 ECTS		
Condition: Enrolled 1 st semester		
Goal of the subject The objective of the course is to present students areas within which it is possible to explore the complex and current topics relating to architecture, urban planning and construction. Students are expected to opt for certain topics in the second half of the semester and study them in accordance with the information that they receive in this course, in other courses that deal with different methodologies and based on research that will be conducted independently.		
Outcome of the subject Learning outcomes include the ability to demonstrate understanding of the impacts of the contemporary built environment - individual buildings, cities, past and contemporary social communities and the broader global issues; history and theory of architecture and urban planning, history of ideas and related disciplines in the arts, cultural studies and architecture, as well as their application in critical debate.		
Content of the subject A series of presentations from various fields, which cover topics and problems that, due to their topicality, complexity and disciplinary orientation, could be the subject of scientific research. In addition to theoretical postulates, concrete research and practical experiences are presented. Modern thought on settlement/ town, building and arts. Philosophy, ideology and politics of a town. Typology and morphology of urban spaces. Culture and town, identity, continuity, tradition, history, belonging, lifestyle, language and communication, symbols, urban culture and cultural pluralism. Economy, interests, property, development, globalization. Arts and construction, development, modernity, aesthetics, language, symbols, perception, experience, psychology. Human rights and democracy. Accessibility, equality, participation. Globalization, economic, technological, ecological, cultural and psycho-anthropological aspects of globalization, global and local values, traditions and identity, and attitude toward change. Sustainable development (economic, environmental and social dimensions of sustainability), sustainable architecture and urban planning, healthy construction, construction in accord with the environment, resources and long-term development prospects. The possibilities and limitations of scientific research in the field, topics and problems discussed are especially emphasized.		
Recommended literature <ul style="list-style-type: none"> - Bojanić P., Đokić, V., urednici: "Teorija arhitekture i urbanizma", Beograd, Univerzitet u Beogradu, Arhitektonski fakultet, 2009. god., - Bojanić P., Đokić, V., urednici: "Misliiti grad", Beograd, Univerzitet u Beogradu, Arhitektonski fakultet, 2011. god., - Bojanić P., Đokić, V., urednici: "Dijalozi sa arhitektama", Beograd, Univerzitet u Beogradu, Arhitektonski fakultet, 2011. god., - Bojanić P., Đokić, V., urednici: "Arhitektura kao gest", Beograd, Univerzitet u Beogradu, Arhitektonski fakultet, 2012. god. - Bojanić P., Đokić, V., urednici: "Tehnika i tehnologija u arhitekturi", Beograd, Univerzitet u Beogradu, Arhitektonski fakultet, 2014. god. - Bojanić P., Đokić, V., urednici: "Živeti zajedno", Beograd, Univerzitet u Beogradu, Arhitektonski fakultet, 2019. god. 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Teaching is a combination of ex-cathedra lectures and discussions with students while making sure that the topic is current and suitable for scientific research.		
Evaluation of knowledge (maximum number of points 100) Seminar paper (oral presentation/defense)		

Name of the subject: PRESENTATION SKILLS			
Teacher(s): Uroš B. Radosavljević, PhD, Associate Professor, Vladimir M. Mihajlov, PhD, Associate Professor, Natasha D. Ćuković Ignjatović, PhD, Associate Professor, Ljiljana S. Đukanović, PhD, Assistant Professor, Milena S. Kordić, PhD, Assistant Professor, Danijela M. Milovanović Rodić, PhD, Assistant Professor, Aleksandra S. Nenadović, PhD, Assistant Professor, Marko S. Nikolic, PhD, Assistant Professor			
Status of the subject: Obligatory			
Number of ECTS points: 6 ECTS			
Condition: Enrolled 1 st semester			
Goal of the subject The goal of the subject is twofold: a) introduction to the models of effective communication and presentation and basic concepts of communication, b) setting the methodological framework in the organizational and professional context of doctoral studies. In a narrower sense, the basic task of the course is to get acquainted with knowledge and master the basic principles of verbal and nonverbal communication both in everyday life and in academic careers in a culturally different environment.			
Outcome of the subject Introduction to the general framework for developing effective skills for presenting (joint and individual) research, scientific, results Developing awareness of how our body functions as we communicate. Development of communication and presentation skills with professional rhetoric. Development of individual communication preferences and style.			
Content of the subject Planning, preparing and conducting a presentation Preparation of a presentation for participation in a conference or scientific gathering of national importance			
Recommended literature Literature suggested by the teacher Literature proposed by the student and approved by the teacher			
Number of active classes: 4 (2+1+1)	Theory: 2	Practice: 1	Остало: 1
Methods of delivering lectures A series of thematic lectures within the module <i>Research Methodology, Writing Scientific Papers and Presentation of Results and Skills of Holding Effective Presentations for Technical-Technological and Social-Humanistic Sciences</i> within the TRAIN University of Belgrade Program.			
Evaluation of knowledge (maximum number of points 100) Activity during the semester - 30 points Final presentation - 70 points			

Name of the subject: GENERAL RESEARCH METHODOLOGY		
Teacher(s): Ana P. Radivojevic, PhD, Full professor; Nenad D. Shekularac, PhD, Full professor; Maria L. Maruna, PhD, Full professor; Aleksandra B. Stupar, PhD, Associate Professor; Vladimir F. Mako, PhD, Full professor; Ana Z. Nikezic, PhD, Associate professor		
Status of the subject: Obligatory		
Number of ECTS points: 4 ECTS		
Condition: Enrolled 1 st semester		
Goal of the subject The goal of the subject is the development of scientific abilities and academic skills in mastering the methodological range of research in three scientific areas of the study program: (1) Technology and Engineering, (2) Social Sciences and (3) Humanities.		
Outcome of the subject Acquisition of competencies and development of abilities for monitoring modern achievements in science and profession, critical work with literature and sources, use of information and communication technologies in research and mastering knowledge in the relevant field, setting a methodologically based approach to research and independent research work related to the topic of the doctoral dissertation.		
Content of the subject <i>Theoretical education</i> It is obligatory for all students and takes place in three scientific fields - six narrower scientific fields: 1. Scientific field: Technology and engineering - Architectural technologies - Architectural engineering 2. Scientific field: Social sciences - Urban studies - Planning and development 3. Scientific field: Humanities - Architectural design and engineering - History of architecture and art		
Recommended literature Groat, Linda and Wang, David. <i>Architectural Research Methods</i> . New York: Wiley, 2002 (1st ed.) De Jong, T.M. and Van der Voordt D.J.M., eds. <i>Ways to study and research: urban, architectural and technical design</i> . Delft: DUP Science, 2005 (1st ed.) <i>Design Research</i> , Proceedings of the Politecnico di Milano Conference, Milano, 2000 Babbie, E. <i>The Practice of Social Research</i> . Belmont, CA: Wadsworth (10th ed.), 2004. Флиvbјерг, Б. <i>Шта могу друштвене науке</i> . Београд: Службени гласник (1st ed. by Cambridge University Press 2001), 2012.		
Number of active classes: 3	Theory: 3	Practice: -
Methods of delivering lectures Lectures, consultations, interactive discussions		
Evaluation of knowledge (maximum number of points 100) Activity during the semester – 10 поена 6 thematic research assignments - 3x15 points - 90 points		

Name of the subject: STUDIES IN ARCHITECTURE		
Teacher(s): Vladimir F. Mako, PhD, Full professor		
Status of the subject: Obligatory		
Number of ECTS points: 8 ECTS		
Condition: Enrolled 2 nd semester		
Goal of the subject The objective is to instruct students in special research areas of architecture as a complex cognitive structure where creativity, historical, social and cultural content of architectural oeuvre intertwine. In doing so, a special emphasis is placed on the transcultural context of architectural creation, as well as on the interdisciplinary nature of the creative process.		
Outcome of the subject Students should demonstrate knowledge of the complexity of issues that determine an architectural work as a cultural product, as well as recognition of the logic of the dynamics of constant development of creative thought about the social value of architecture and its importance for the development of transcultural society.		
Content of the subject The first part of the course (theoretical education) includes the presentation of specific aspects of architectural creation, which can assist students in determining the degree of complexity in the consideration of specific socially and culturally conditioned issues pertaining to architectural creation. In the second part of the course, each student determines the number of interrelated aspects and problems of architectural creation, which is the basis for further establishment and development of their cognitive structures related to issues of cultural and social manifestations of architecture. At the same time, special attention is paid to the logical coherence, and cultural and social determinism of the system of thought structured in such a manner.		
Recommended literature <ul style="list-style-type: none"> - Kersten Harries, <i>The Ethical Function of Architecture</i>, The MIT Press, Cambridge 1998 - Jennifer Bloomer, <i>Architecture and the Text</i>, Yale University Press, New Haven 1993 - Theodor Adorno, <i>The Culture Industry</i>, Routledge, London 2004 - Henry Lefebvre, <i>The Production of Space</i>, Blackwell, Malden 1991 		
Number of active classes: 2 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Instruction is a combination of ex-cathedra lectures and discussions with students while making sure that the topic is current and suitable for scientific research. Seminar paper (oral presentation).		
Evaluation of knowledge (maximum number of points 100) Attendance = 10p Preparations / study of literature and preliminary paper's content =30p Seminar paper = 60p		
Начин провере знања могу бити различити: Seminar paper, oral colloquia		

Name of the subject: ACADEMIC WRITING SKILLS			
Teacher(s): Uroš B. Radosavljević, PhD, Associate Professor, Vladimir M. Mihajlov, PhD, Associate Professor, Natasha D. Ćuković Ignjatović, PhD, Associate Professor, Ljiljana S. Đukanović, PhD, Assistant Professor, Milena S. Kordić, PhD, Assistant Professor, Danijela M. Milovanović Rodić, PhD, Assistant Professor, Aleksandra S. Nenadović, PhD, Assistant Professor, Marko S. Nikolic, PhD, Assistant Professor			
Status of the subject: Obligatory			
Number of ECTS points: 6 ECTS			
Condition: Enrolled 2 nd semester			
Goal of the subject The course aims to develop active skills in scientific communication - mostly in academic writing in Serbian and English. Through an increased level of scientific communication, students will increase their chances of becoming part of the international research community. Insight into theoretical concepts of scientific communication will be gained, the importance of research focus will be pointed out, scientific writing will be defined as a key competence in higher education and awareness of the importance of scientific communication during academic career will be raised.			
Outcome of the subject Development of abilities and skills in planning, conducting and presenting research in one's discipline. Building academic capacities in the field of preparation and realization of written papers for various purposes (review paper, research paper, critical work ...) The result of the final paper is a scientific paper prepared for publication in a journal of national importance.			
Content of the subject Planning, preparation and publication process of scientific paper			
Recommended literature Literature suggested by the teacher Literature proposed by the student and approved by the teacher			
Number of active classes: 4 (2+1+1)	Theory: 2	Practice: 1	Остало: 1
Methods of delivering lectures A series of thematic lectures within the module <i>Research Methodology, Writing Scientific Papers and Presentation of Results and Skills of Holding Effective Presentations for Technical-Technological and Social-Humanistic Sciences</i> within the TRAIN University of Belgrade Program.			
Evaluation of knowledge (maximum number of points 100) Activity during the semester - 30 points Final presentation - 70 points			

Name of the subject: DISTINCT RESEARCH ISSUES		
Teacher(s): Branka J. Dimitrijević, PhD, Full professor; Dejan T. Vasović, PhD, Full professor; Eva J. Vaništa Lazarević, PhD, Full professor; Mina Z. Petrovic, PhD, Full professor; Vladimir M. Lojanica, Full professor; Luka P. Skansi, PhD, Associate Professor		
Status of the subject: Obligatory		
Number of ECTS points: 4		
Condition: Enrolled 2 nd semester		
Goal of the subject The goal of the subject is the development of scientific abilities and academic skills in mastering the thematic and methodological range of research in three scientific areas of the study program: (1) Technology and Engineering, (2) Social Sciences and (3) Humanities.		
Outcome of the subject The course should enable students to articulate scientific arguments and identify the main argumentative positions in the approaches to architecture that are characteristic of modern humanities and social sciences. Furthermore, the course should enable students to articulate the historical contextualization of architecture, to shape their analytical skills in the reading of the architectural structure and to adequately conceptualize their research.		
Content of the subject <i>Theoretical education</i> It is obligatory for all students and takes place in three scientific fields - six narrower scientific fields: 1. Scientific field: Technology and engineering - Architectural technologies - Architectural engineering 2. Scientific field: Social sciences - Urban studies - Planning and development 3. Scientific field: Humanities - Architectural design and engineering - History of architecture and art		
Recommended literature - Kenneth Frampton, <i>Studies in tectonic culture: the poetics of construction in nineteenth and twentieth-century architecture</i> , Cambridge, Mass.; London: The MIT Press, 1995 - Reyner Banham, <i>The architecture of the well-tempered environment</i> , The University of Chicago Press, Chicago 1984. - Pier Luigi Nervi, <i>Aesthetics and technology in building</i> , Harvard University Press, 1965		
Number of active classes: 3	Theory: 3	Practice: -
Methods of delivering lectures Lectures, consultations, interactive discussions		
Evaluation of knowledge (maximum number of points 100) Activity during the semester – 10 поена 6 thematic research assignments - 3x15 points - 90 points		

Name of the subject: TEXTUALITY OF ARCHITECTURE		
Teacher(s): Aleksandar M. Ignjatović, PhD, Associate professor		
Status of the subject: Obligatory		
Number of ECTS points: 8		
Condition: Enrolled 3 rd semester		
Goal of the subject Introducing students to the foundations of interpretation of architecture and visual arts through two interpretive perspectives: 1) architecture as an indoor and outdoor sign system; 2) architecture as an integral part of the production, exchange and consumption of knowledge in society and ideological construction of identity. The objective is to observe, critically examine and interpret architecture as a textual phenomenon in the diachronic and synchronic perspective and different social and historical contexts.		
Outcome of the subject By attending classes in this course, participants should acquire intellectual competencies that will enable them to view architecture and visual culture in the light of the premise that human cognition does not stem directly from reality, but from forms, modalities and languages of its presentation. By attending classes in this course, students should acquire competencies for independent textual analysis of architecture and meaningful articulation of their own research.		
Content of the subject Explication of contemporary theoretical approaches is used to examine the problem of meaning and interpretation of architecture as a cultural text. The topic and content of the course include two problem areas: 1) analysis of architecture as a specific disciplinary order of knowledge; 2) analysis of architecture as an integral part of processes and practices shaping social reality. The first area includes a critical examination of a number of interpretative frameworks inherent in architecture as a discipline: from a theory of forms to style and typologies; The second area includes a discursive and textual analysis of architecture and visual culture through the application of semiotics, hermeneutics and discourse analysis.		
Recommended literature <ul style="list-style-type: none"> - Adrienne Brown, <i>The Black Skyscraper: Architecture and the Perception of Race</i>, Johns Hopkins University Press, 2017. - Aleksandar Ignjatović, <i>U srpsko-vizantijskom kaleidoskopu: Arhitektura, nacionalizam i imperijalna imaginacija 1878-1941</i>; Orion Art i Univerzitet u Beogradu, 2016. - Richard Howells, Joaquim Negreiros, <i>Visual Culture</i>, Cambridge, 2012. - Whitney Davis, <i>A General Theory of Visual Culture</i>, Princeton, 2011. - Aleksandar Ignjatović, <i>Jugoslovenstvo u arhitekturi 1904-1941</i>, Beograd, 2007. - Anthony Alofsin, <i>When Buildings Speak</i>, Chicago and London, 2006. - Neil Leach (ed.), <i>Rethinking Architecture: A Reader in Cultural Theory</i>, London and New York, 2005. - Matthew Rampley (ed.), <i>Exploring Visual Culture: Definitions, Concepts, Contexts</i>, Edinburgh, 2005. - Stephen Melville and Bill Readings, <i>Text and Textuality</i>, Duke University Press Books, 1995. 		
Number of active classes: 2 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures: Lectures with discussion		
Evaluation of knowledge (maximum number of points 100) Seminar paper 50 points; oral exam: 50 points		

Name of the subject: PRESENTATION AND ACADEMIC WRITING SKILLS: SYNTHESIS			
Teacher(s): Aleksandar Č. Videnović, PhD, Associate professor; Zoran N. Đukanović, PhD, Associate professor; Jelena A. Živković, PhD, Associate professor; Dušan M. Ignjatović, PhD, Associate professor; Ksenija Ž. Lalović, PhD, Associate professor; Vladimir B. Milenković, PhD, Associate professor; Ana Z. Nikezić, PhD, Associate professor; Budimir S. Sudimac, PhD, Associate professor			
Status of the subject: Obligatory			
Number of ECTS points: 6 ECTS			
Condition: Enrolled 3 rd semester			
Goal of the subject The main goal is to develop active skills in scientific communication - mostly in academic writing in the mother tongue and English. Through an increased level of scientific communication, students will increase their chances of becoming part of the international research community. Insight into theoretical concepts of scientific communication will be gained, the importance of research focus will be pointed out, scientific writing will be defined as a key competence in higher education and awareness of the importance of scientific communication during an academic career will be raised.			
Outcome of the subject Development of abilities and skills in planning, conducting and presenting research in the narrower field of research. Building academic capacities in the field of preparation and realization of written papers for various purposes (review paper, research paper, critical work ...)			
Content of the subject Planning, preparation and publication process of a scientific paper			
Recommended literature Literature suggested by the teacher Literature proposed by the student and approved by the teacher			
Number of active classes: 4 (2+1+1)	Theory: 2	Practice: 1	Остало: 1
Methods of delivering lectures A series of thematic lectures within the module <i>Research Methodology, Writing Scientific Papers and Presentation of Results and Skills of Holding Effective Presentations for Technical-Technological and Social-Humanistic Sciences</i> within the TRAIN University of Belgrade Program.			
Evaluation of knowledge (maximum number of points 100) Activity during the semester - 30 points Final presentation - 70 points			
Content of the subject Planning, preparation and publication process of scientific paper and presentation			

Name of the subject: RESEARCH DISCOURSE		
Teacher(s): Miodrag P. Šuvaković, PhD, Full professor; Branko M. Mitrović, PhD, Full professor; Radina M. Vučetić, PhD, Associate professor; Vasilije P. Gvozdrenović, PhD, Associate professor; Violeta R. Orlović Lovren, PhD, Associate professor		
Status of the subject: Obligatory		
Number of ECTS points: 4 ECTS		
Condition: Enrolled 3 rd semester		
Goal of the subject The objective of the study unit is the development of scientific capabilities and academic skills in the mastering of a range of methodological and theoretical foundations of scientific or artistic research in relation to the interconnected disciplines, as well as the application of the methodological and theoretical knowledge in the elective seminar paper related to the topic of the doctoral dissertation.		
Outcome of the subject Development of students' ability to understand and critically evaluate philosophical, sociological, historical, and economic aspects of social development, and their links to other aspects of social life. Learning outcomes include the exploration and mastering of the techniques of discourse research of art and their application to the analysis and research of the interdisciplinary relationship between art and architecture. Similarly, the course should enable students to conduct independent research in the philosophical, sociological, historical, and artistic discourse related to the topic of the doctoral dissertation.		
Content of the subject <i>Theoretical education</i> It is obligatory for all students and takes place in 5 thematic fields: - Research discourse: Theory of art and culture, - Research discourse: History, philosophy, science and technology, - Research discourse: Spatial cognition, - Research discourse: Yugoslav cultural space, - Research Discourse: Environmental Sciences.		
Recommended literature Branko Mitrovic: <i>Philosophy for Architects</i> , New York: Princeton Architectural Press, 2012. Branko Mitrovic: <i>Visuality for Architects</i> , Charlottesville: University of Virginia Press, 2013. Jacques Derrida and Eva Meyer, "Architecture where the Desire may live", <i>Labyrinth und Archi/Textur</i> , 1984, pp. 319-321. Петровић М. 2009. <i>Трансформација градова: ка деполитизацији урбаног питања</i> . Београд: Институт за социолошка истраживања, Филозофског факултета УБ. C. Harrison, P. Wood(eds), <i>Art in Theory 1900-2000, An Anthology of Changing Ideas</i> , Basil Blackwell, 2003.		
Number of active classes: 3	Theory: 3	Practice: -
Methods of delivering lectures <i>ex cathedra</i> lectures, focused discussion, interactive teaching, individual consultations for seminar work and research related to the topic of the doctoral dissertation		
Evaluation of knowledge (maximum number of points 100) 5 thematic research assignments - 5x20 points - 100 points		

ELECTIVE COURSES

ELECTIVE COURSES
STUDY UNIT GENERAL RESEARCH METHODOLOGY -
ELECTIVE SEMINAR

Name of the subject: RESEARCH METHODOLOGY IN ARCHITECTURE IN THE CONTEXT OF ARCHITECTURAL TECHNOLOGIES		
Teacher(s): Ana P. Radivojević, PhD, Full Professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 1 st semester		
Goal of the subject: The main objective of the course is to develop the scientific and academic skills necessary to master the research methodology in the field of Architecture, in which problems are explored in the context of architectural technologies, which includes various issues related to the choice of materials, techniques and technologies of construction. The additional objective of the course is to enable the student to critically read the relevant scientific literature, ask a research question, establish a methodology of research work by defining the topic, problems and hypotheses of research, determine the basic stages of a research project. Given the complexity and multidisciplinary nature of modern scientific research in the field of architectural technologies, arising from awareness of the physical phenomena to which the building is exposed, the health aspects and ecological implications of construction, as well as the standards and strategies that accompany them, the special objective of the course is to familiarize students with specific methods characteristic of this type of research that include various qualitative and quantitative methods, as well as multi-criteria optimization, simulation and verification methods, experiment, etc.		
Исход предмета: Upon completion of the course, it is expected that the student will be able to pose a research problem, understand and define the research framework, select the necessary research methodology that would be adequate to study characteristic problems in the field of architectural technologies, and related to the topic of a future doctoral dissertation.		
Content of the subject <i>Theoretical education</i> Theoretical teaching is conducted through the following topics: The notion of the scientific method; Knowledge specialization and relevance to access to scientific research; Defining a research question, problem and research framework; Methodological frameworks and research methods; The complexity of the research problem and the multi-criteria optimization approach; Simulation, verification, measurement and experiment in the service of research in the field of architectural technology; <i>Practical education</i> Student research work to deepen the knowledge gained in lectures through various forms of research that are related to the future field of research and include the identification and analysis of relevant literature, analysis of standards and relevant strategic documents, research and analysis of applied methodologies and research methods in the relevant scientific literature at examples related to future student research. The result of theoretical and practical work is a final essay in which the student, based on previous analyzes, defines the problem, framework and structure of the research and proposes the necessary methods.		
Recommended literature - Danuta Niezabitowska, Elzbieta. Research Methods and Techniques in Architecture. New York and London: Routledge, Taylor & Francis Group, 2018. - Fernandez, John. Material Architecture. Emergent Materials for Innovative Buildings and Ecological Construction. Oxford: Elsevier, Architectural Press, 2006. - Groat, Linda N. and David Wang. Architectural Research Methods. Hoboken, New Jersey: John Wiley & Sons, Inc., 2013. - Knight, Andrew and Les Ruddock. Advanced Research Methods in the Built Environment. Oxford: Wiley-Blackwell, 2008.		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Lectures, seminars and discussions with the active participation of students; consultations;		
Evaluation of knowledge (maximum number of points 100) short papers on assigned topics (30 points) + final seminar paper (70 points)		

Name of the subject: RESEARCH METHODOLOGY IN THE FIELD OF ARCHITECTURAL ENGINEERING		
Teacher(s): Nenad D. Šekularac, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 1 st semester		
Goal of the subject The main objective of the course is to provide students with an insight into the theoretical basis of the methodology of scientific research in the field of architectural engineering. Training students for scientific research through the scientific literature, research work with sources and documentation, identification and presentation of problems and research hypotheses, to write the first scientific paper. The objective of the course is to develop scientific skills, critical thinking, academic skills, as well as to develop students' creative skills, mastering a wide range of methodological frameworks for research in the field of architectural engineering.		
Outcome of the subject The outcome of the course is the acquisition of the student's ability to identify and define research problems as well as appropriate research methods through the implementation of all acquired knowledge and skills in the field of architectural engineering and in doctoral studies. The outcome of the course is the acquired knowledge of methods and techniques of scientific research work and application in the design of scientific work.		
Content of the subject <i>Theoretical education</i> Introduction to research methodology in architectural design with special reference to the field of architectural engineering. General part, the general methodology of scientific research with logical bases, general and special methods of cognition; adaptation of logical and theoretical-thought methods in architecture (inductive-deductive, abstract method, comparative analysis, method of graphical representation); methodology of critical analysis of individual parts and methods of comparative analysis. <i>Practical education</i> Verification of theoretical assumptions through the research process - work on project research in the field of architectural engineering. During the preparation of the paper, the methodology of the research work will be checked. This research envisages analysis of literature, analysis of previous research in this field, research of archival material, methods of observation-observation in the field, conducting the entire research procedure with different methods and systematization of obtained results, their analysis and comparison and conclusions. and all to acquire new knowledge about the issues that the student deals with in the research of a specific given problem.		
Recommended literature - De Jong, T. M., and Van der Voordt, T. J. M., Eds., Ways to study and research. Urban, architectural and technical design. Delft: Delft University Press, 2002., - Groat, Linda and Wang, David. Architectural Research Methods. John Wiley & Sons, 2002., - Ilić M., Naučno istraživanje, Opšta metodologija, Univerzitet u Beogradu, Filološki fakultet, Beograd, 1994., - Živković M., Uvod u metodologiju naučnog istraživanja, Univerzitet u Beogradu – Arhitektonski fakultet, Beograd, 1977., - Šušnjić Đ., Metodologija, kritika nauke, Čigoja štampa, Beograd, 2002., Depending on the individual topic of the research work, the student will define additional literature with the teacher.		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Ex-cathedra lectures, interactive forms of teaching, active participation in discussions		
Evaluation of knowledge (maximum number of points 100) activity during the semester and short papers on assigned research topics related to the topic of the seminar paper (30 points) + final seminar paper (50 points) + presentation of the paper (20 points)		

Name of the subject: URBAN STUDIES		
Teacher(s): Aleksandra B. Stupar, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 1 st semester		
Goal of the subject Introduction to the main areas of research - improving the academic and research knowledge and skills, positioning research topics within main contemporary theoretical concepts. Underlining the importance of a multidisciplinary approach toward contemporary issues dealing with recent urban phenomena. Identifying the elements of the dynamic development of cities, urban regions and urban society. Defining and exploring the relationship between them.		
Outcome of the subject The seminar enables candidates to obtain the necessary critical knowledge and intellectual competencies to individually conduct research and deal with theoretical challenges within the areas of their interest. At the same time, they can use the recent body of knowledge targeting urban studies, develop critical thinking and communicate on a professional level with the academic community.		
Content of the subject <i>Theoretical education</i> The seminar is focused on the understanding of cities and metropolitan regions, as well as of numerous processes related to their development and transformation. The historical perspective, along with the most recent tendencies generated from the area of urban studies, will be considered through key ideas, concepts and theories related to urban studies and urban society. The candidates will be encouraged to identify individual interests in a selected thematic field, establish a relationship between relevant aspects and disciplines, and apply proper methodology, following the research aims. <i>Practical education</i> The individual research is based on multidisciplinary and interdisciplinary approaches to the selected problem, applying the adequate methodology. The emphasis could be placed on sociological, anthropological, historical, planning, environmental or economic aspects of a selected urban phenomenon. The final result could be both theoretical and applicable.		
Recommended literature <ul style="list-style-type: none"> - Gottdiener, M., Budd, L., Lehtovuori, P., eds. (2015) Key Concepts in Urban Studies, 2nd edition, Sage Publication LTD - Hannigan J., Richards, G., eds. (2017) The SAGE Handbook of New Urban Studies, Sage Publication LTD - Leitner, H., Peck, J., Sheppard, E., eds. (2019) Urban Studies Inside/Out: Theory, Method, Practice 1st Edition, Sage Publication LTD - Paddison, R., ed. (2000) Handbook of Urban Studies, Sage Publication LTD - Silva, C. N., ed. (2012) Online Research Methods in Urban and Planning Studies: Design and Outcomes, IGI Global 		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures interactive forms of teaching		
Evaluation of knowledge (maximum number of points 100) pre-examination obligations 30, seminar paper 70		

Name of the subject: SCIENTIFIC RESEARCH METHODOLOGY IN URBAN PLANNING		
Teacher(s): Marija L. Maruna, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 1 st semester		
Goal of the subject The main objective is to develop scientific skills and academic skills in mastering the methodological range of research of a scientific character in the field of urban planning. The specific objectives of the course are: <ul style="list-style-type: none"> - review of research methodologies: quantitative and qualitative methods, - critical analysis of social science research methods applied in the field of urban planning, - introduction to the basic stages of research work, - identification and operationalization of key research questions and limitations of the research process, - the development of a structured view of contemporary knowledge of a particular topic. 		
Outcome of the subject Acquiring competencies and developing skills for: <ul style="list-style-type: none"> - scientific research, production and critical analysis of scientific texts, - noting the connection between theoretical principles and applied research methods, - conducting research using quantitative and qualitative methods, - understanding the ethical and social aspects of the research process, - conducting a systematic review of contemporary knowledge of a particular topic. 		
Content of the subject <ul style="list-style-type: none"> - The logic of scientific research in the field of urban planning. - Selection of current topics and issues. - Quantitative method: Survey. - Qualitative method: Interview. - Case study. - Discourse analysis. - Engaged research. - Familiarity with ethical issues related to the study of social phenomena. - Research Example: Literature Review. 		
Recommended literature <ul style="list-style-type: none"> - Silva, A.E., Healey, P., Harris, N., Van den Broeck, P. (Eds.) (2014) The Routledge Handbook of Planning Research Methods. Abingdon: Routledge. - Wiek A., Lang D.J. (2016) Transformational Sustainability Research Methodology. In: Heinrichs H., Martens P., Michelsen G., Wiek A. (eds) Sustainability Science. Springer, Dordrecht - Babbie, E. (2004) The Practice of Social Research (10th ed.). Belmont, CA: Wadsworth - Wang, X., vom Hofe, R. (2007) Research Methods in Urban and Regional Planning. Springer. - Taylor, S., Bogdan, R., De Vault, M. (2016) Introduction to Qualitative Research Methods. Wiley. 		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures <i>ex-cathedra</i> lectures, directed discussion, interactive teaching, presentations, individual consultations for exam work		
Evaluation of knowledge (maximum number of points 100) Colloquium - 35 points Seminar paper - 65 points		

Name of the subject: PARADIGMS AND PRECEDENTS IN ARCHITECTURE		
Teacher(s): Ana Z. Nikezić, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 1 st semester		
Goal of the subject Developing scientific and academic skills in mastering a range of methodological research strategies in the field of Architecture. Specific goals are: defining the research problem and topic, thus positioning it in a complex disciplinary framework of architecture, familiarization with the basic elements and stages of research, critical analysis of the research literature and combined research methods in the field of architecture.		
Outcome of the subject Understanding the complex relationship between research and design Understanding of concepts (explain, isolate, interpret) in relation to research in architecture Ability to grasp the complex methodological framework of research in the field of architecture Understands the relationship between thematic framework and subject matter in architecture Critically reviews analyze and evaluate previous research Integrates and uses the acquired knowledge to design the research concept		
Content of the subject <i>Theoretical education</i> <ul style="list-style-type: none"> - Design and Research - The wicked problem of networking the research purpose, question and subject of research - Literature or Design Review - A kaleidoscope of strategies in researching architecture and design - Defining a research framework - Logical argumentation and interpretative capacity of research (abductive method) <i>Practical education</i> <ul style="list-style-type: none"> - Critical analysis of precedent research in the field of architecture - Critical analysis for the literature review of the chosen research article - Case Study - Research question; Research framework; Complex structure of Research Strategies and Tactics 		
Recommended literature <ul style="list-style-type: none"> - Goat, L., Wang, D. (2013) Architectural research methods. Wiley Academy. - Lucas, R., (2016) Research methods for Architecture. Laurence King Publishing. - Yin, R., (2009) Case study research: Design and Methods, Sage publishing. 4th ed. - Bell, Judith and Stephen Waters. (2014) Doing Your Research Project, A Guide for First-time Researchers. Open University Press, 6th ed. - Robinson, J „Arch.Research: Incorporating Myth and Science“ Journal of Arch.Education 44 (1) 1990: 20-32 - Cross, N, et all “Design method and scientific method” Design Studies Vol 2 No 4 October 1981: 195-201 - Rendell, J., “Arch. research and disciplinarity”. Architectural Research Quarterly, 2004, no8, issue 2, 141-147 		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Thematic lectures Independent research work		
Evaluation of knowledge (maximum number of points 100) Critical analysis of previous research (1500 word explication) 15 points Critical analysis of the literature of the research article (explication 1500 words) 15 points Case study (seminar paper 3500 words) 70 points		

Name of the subject: RESEARCH BY DESIGN METHODOLOGY		
Наставник: Vladimir F. Mako, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 1 st semester		
Goal of the subject The basic goal is the development of scientific capabilities and academic skills in the mastering of a range of artistic research methodologies in the field of architecture and urban planning—A and U. The broader objective is to keep abreast of modern developments in the educational and artistic field of architecture and urban planning, which are comparable to the corresponding courses in the programs of the European Higher Education Area. An additional objective is to train the students for the critical formulation of research questions, for applying a methodology to formulate original research related to the topic of the doctoral dissertation. Students apply methodological knowledge through practical classes at the seminar of their choice related to the topic of the doctoral dissertation.		
Outcome of the subject Acquisition of competencies and development of skills for keeping abreast of modern developments in the field of science and profession, critical thinking while using literature and sources, the use of information and communication technologies, research and acquisition of knowledge in the relevant fields, taking a methodological research approach, and independent research relating to the doctoral dissertation topic.		
Content of the subject Theoretical education refers to the methodology of the research by design.		
Recommended literature <i>Design Research</i> , Proceedings of the Politecnico di Milano Conference, Milano, 2000 <i>Explorations in Architecture: Teaching, Design, Research</i> , ed. Reto Deiser, Birkhauser, Basel 2008 <i>Design Theory and Practice</i> , Proceedings of the International Conference, Royal College of Art, The Design Council, London 1984		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures – <i>ex cathedra</i> lectures, focused discussion, interactive teaching		
Evaluation of knowledge (maximum number of points 100) Points earned through continuous work during the semester.		

ELECTIVE COURSES
STUDY UNIT DISTINCT RESEARCH ISSUES –
ELECTIVE SEMINAR

Name of the subject: ARCHITECTURAL TECHNOLOGIES		
Teacher(s): Branka J. Dimitrijević, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 2 nd semester		
Goal of the subject The subject goal is to explain how the need for global sustainable development has influenced policies and practice in architecture, construction and urban planning, as well as the emergence of innovations in the design of new buildings, planning of new urban areas, and improving existing buildings and the built environment. Lectures and seminars include examples of initiatives and practices influenced by the above changes. The subject goal is to stimulate innovative approaches to architectural design and urban planning.		
Outcome of the subject Understanding of the context that stimulates development and application of innovations that contribute to the sustainability of buildings and urban areas. Acquiring and expanding the knowledge on technological innovations that can be applied in architectural and urban planning practice to improve the sustainability of new and existing buildings and urban areas. Increased interest of students to apply innovations in their future professional practice.		
Content of the subject <i>Theoretical education</i> The lectures will cover the history of the concept of sustainable development from the start of industrialization in the 18 th century until today, examples of changes in building regulation and urban planning, examples of related innovations throughout history and in contemporary architecture and urban planning, and examples of the initiatives for stimulating application of innovations in practice. <i>Practical education</i> The students will select one existing building to demonstrate how innovative technologies can improve its sustainability. The research will be presented as a seminar dissertation (8,000-10,000 words) that will include the analysis of the selected building in terms of its sustainability, an overview and characteristics of technologies that could be applied to improve its sustainability, and an estimate of the improvement of its sustainability following the proposed application of innovative technologies.		
Recommended literature <ul style="list-style-type: none"> - Bonneuil, C. & J.B. Fressoz (2017) The Shock of the Anthropocene. London-New York, Verso. - Rifkin, J. (2013) The Third Industrial Revolution. New York: Palgrave Macmillan. - Actes Sud/ Cite de l'Architecture & du Patrimoine (2009) Ecological Living: What architecture for a more sustainable city? Paris: Institute Francaise d' Architecture. - Addington, M. & Schodek, D. (2005) Smart Materials and Technologies for the Architecture and Design Professions. Oxford: Architectural Press. - Anink, D., Boonstra, C. and Mak, J. (1996) Handbook of Sustainable Building: An Environmental Preference Method for Selection of Materials for Use in Construction and Refurbishment. London: James&James. - Pucar, M. (2006) Bioklimatska Arhitektura: Zastakljeni prostori i pasivni solarni sistemi. Beograd: IAUS. - Thomas, R. & Fordham, M. & Partners (Eds) (2001) Photovoltaics and Architecture. London: Spon Press. - Roaf, S., Fuentes, M. & Thomas, S. (2001) Ecohouse: A Design Guide. Oxford: Architectural Press. - Edwards, B. & Turrent, D. (Eds.) (2000) Sustainable Housing: Principles & Practice. New York: E&F Spon. - Smith, P.F. (2001) Architecture in a Climate of Change: A guide to sustainable design. Oxford: Architectural Press. 		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Lectures, group and individual presentations		
Evaluation of knowledge (maximum number of points 100) The analysis of the sustainability of an existing building (30 points) A proposal for the potential application of innovative technologies to improve the sustainability of an existing building (70 points).		

Name of the subject: SPECIFIC PROBLEMS OF RESEARCH IN ARCHITECTURAL ENGINEERING		
Teacher(s): Dejan T. Vasović, PhD, Assistant professor; Radojko M. Obradović, , PhD, Assistant professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 2 nd semester		
Goal of the subject Reaching the modern level of scientific knowledge in the fields of AE, Architecture and Urbanism. Following of scientific achievements in the fields of AE, Architecture and Urbanism. Understanding, interpretation and critical review of the scientific achievements in the field of AE. Training for scientific work and creative development in the field of AE.		
Outcome of the subject Comprehensive knowledge and understanding of scientific fields in the area of AE. Ability to follow independently and participate in dialogues in areas of AE. Ability to participate independently in the research and work in fields of AE.		
Content of the subject <i>Theoretical education</i> Presentation of contemporary approaches in mathematical and experimental modelling of structural materials, elements and assemblies of the structures of architectural buildings. Development of a methodological approach for modelling structural materials, elements and assemblies of structures of architectural buildings. <i>Practical education</i> Verification of theoretical settings through practical work on the development, generation and modelling of materials or structures for the structural application in architectural objects.		
Recommended literature Books: Радојковић, М., <i>Испитивање конструкција 1 – 2</i> (1979) Грађевински факултет; Engel, H., <i>Structure Systems/Tragsysteme</i> , (2009) Hatje Cantz; Watts, A., <i>Modern Construction Handbook</i> (2018) Birkhauser; Nevil, A.M., <i>Properties of Concrete</i> (2002) Prentice Hall; Journals: ACI Structural Journal, ACI Material Journal; Engineering Structures; Structures; IASS Journal		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures <i>Ex-cathedra</i> lectures, case study analysis, student discussions, mathematical testing and modelling of structures, consultations, experimental work on the models of the material or structural assemblies (where possible).		
Evaluation of knowledge (maximum number of points 100) Seminar work (0 – 40 points); Project/model presentation (0 – 60 points)		

Name of the subject: URBAN REVITALIZATION TOWARDS ATTRACTIVE CITIES		
Teacher(s): Eva J. Vaništa Lazarević, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 2 nd semester		
Goal of the subject The main objective of this course is to enrich, systematize and deepen the acquired knowledge on the phenomenon of urban renewal, city development urban revitalization methods. In addition, the goal is to acquaint students with various theories and theoretical approaches regarding contemporary urban concepts and the development of attractive cities of the third millennium.		
Outcome of the subject One of the outcomes of this course is to enable students to research independently and develop critical thinking, through the analysis of primary and secondary theoretical resources and empirical research in the field of urban renewal and urban revitalization viewed in different aspects.		
Content of the subject <i>Theoretical education</i> Theoretical lectures include an overview of the latest paradigms in the field of urban renewal and regeneration, through adaptation to global changes, the acceptance of new sensations and phenomena in terms of social relations, new housing concepts, ecological design, cultural heritage, architectural heritage and its protection, all within the context of large urban renewal and modern development. Theoretical teaching includes critical analysis of primary and secondary sources. <i>Practical education</i> Practical classes are organized to support students' research work, through context analysis of all specific data collected in the fieldwork, expert observation, and processing of collected data. Practical classes are also planned through self-concept design, methodology selection and student research, followed by mentors and consultative work.		
Recommended literature <ul style="list-style-type: none"> - Vaništa Lazarević, Eva. Obnova gradova u novom milenijumu. Beograd: Classic map studio, 2003. - Vaništa Lazarević, Eva. Urbana Rekonstrukcija. Beograd: Zadužbina Andrejević, 1999. - Стојков, Борислав, ур.Обнова градова у Србији – темељне одреднице. Београд: Институт за архитектуру и урбанизам Србије, 1996. - Lord Rogers of Riverside, ed.Towards an Urban Renaissance: Final Report of the Urban Task Force. London: Spon Press, 2002. - Roberts, Peter W., and Hugh Sykes, ed.Urban regeneration. London: SAGE Publications, 2000. - Jokilehto, J. A history of architectural conservation. London, 1999. 		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Mentoring and consultative work, lectures, presentations, exam.		
Evaluation of knowledge (maximum number of points 100) Interaction and activity during lectures: 10 points; Presentation of research in the semester: 30 points: Seminar paper (exam): 60 points in total.		

Name of the subject: SOCIOLOGICAL APPROACH TO SPACE, URBAN PLANNING AND CITY DEVELOPMENT		
Teacher(s): Mina Z. Petrović, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 2 nd semester		
Goal of the subject The goal of the course is twofold. First, students are to gain an understanding of the importance that social factors have in space planning and urban development. Second, by working on a specific topic, students are to adopt the logic of the sociological concepts and methodology of social sciences in the study of spatial and urban phenomena.		
Outcome of the subject Understanding the social production of space and the concept of relational space, as well as comprehending the interconnectedness of the city as a social entity and urban planning as a specific field of social power distribution. Students gain methodologically sound insights on how to apply sociological concepts to research relevant for spatial/ urban planning and development of cities.		
Content of the subject <i>Theoretical education</i> The focus is on Lefebvre's concept of social production of space, the relational understanding of space by Massey, Castells' understanding of the flows of space and spaces of place, Harvey's interpretation of the circulation of capital in space, the significance of Bourdieu's concepts of the habitus and field in the study of urban diversity. Particular attention is given to social and environmental sustainability issues; urban planning for people not for profit; social-ethnic-gender inequalities and the right to the city; processes of gentrification and ghettoization; transformation of public space; the imperative of global competitiveness of cities; contemporary migration and transnational urbanism; the phenomena of glocalization, de/re-territorialization and branding of cities, etc. The course employs a macro and micro analytical perspective, and focuses on the experience of European cities, with particular reference to post-socialist cities. <i>Practical education</i> Each student chooses a research topic (for example gentrification of neighbourhoods), defines the subject of research, relevant research goals and context, find an adequate concept, selects an appropriate data collection technique, samples sources of data and operationalizes concepts - develops questionnaire, interview/observation guidance, case study, etc.		
Recommended literature <ul style="list-style-type: none"> - Andranowich, G., Riposa, G. 1993. Doing Urban Research. Sage Publications. - Brand, P., Thomas, M. 2005. Urban Environmentalism. London/New York: Routledge - Bridge, G. 2005. Reason in the City of Difference. London/New York: Routledge. - Castree, N., Gregory, D. 2006. David Harvey. A Critical Reader. Blackwell Publishing. - Fuller, M., Low, M. 2017. An Invitation to Spatial Sociology. Current Sociology Vol. 65(4) 469– 491 - Hirt, S., Ferenčuhová, S., Tuvikene, T.2016. Conceptual forum: the “post-socialist” city, Eurasian Geography and Economics, 57:4-5, 497-520, - Kastels, M. 2002. Moć identiteta. Zagreb: Golden marketing - Low, S., Smith, M. (eds.)2006. The Politics of Public Space. London/New York: Routledge. - Massey, D. 2008. For Space. Sage Publications. - Petrović, M. 2009. Transformacija gradova: ka depolitizaciji urbanog pitanja. Beograd: SI, FF. - Petrović, M., Toković, M. 2018. Gradovi u ogledalu: zmeđu identiteta i brend imidža. Beograd: ISI, FF. - Savage, M. 2011. The Lost Urban Sociology of Pierre Bourdieu. In: Bridge, G., Watson, S. (eds.) The New Blackwell Companion to City. Willey / Blackwell Publications. - Sheller, M. 2017. From Spatial to Mobility Turn, Current Sociology Vol. 65(4) 623–639 - Smth, M.P.2010. Transnational Urbanism Revised. Journal of Ethnic and Migration Studies, 31:2, 235-244, - Stanek, L. 2011. Henri Lefebvre on Space. University of Minnesota Press. - Šarinić, J., Čaldarović, O. 2015. Suвременa sociologija grada – od nove urbane sociologije grada prema sociologiji urbanog. Zagreb: Naklada Jasenski i Turk. - Vujović, S., Petrović, M. 2005. Urbana sociologija - sociološka hrestomatija, Beograd: ZUNS 		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Lectures; seminars - research assignment, discussion, presentations.		
Evaluation of knowledge (maximum number of points 100) 70 points for the research assignment, 30 points for the final presentation		

Name of the subject: CONTEMPORARY ARCHITECTURE		
Teacher(s): Vladimir M. Lojanica, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 2 nd semester		
Goal of the subject The main objective of the course Contemporary Architecture is related to acquiring competencies for scientific thematic research with the specific doctoral dissertation topic, which is relevant for the global academic community and comparable to the relevant topics in the European educational programs. An additional objective is to acquire the ability to publish the results of the research and to structure scientific discussion.		
Outcome of the subject The expected outcome of the course relates to getting the skills of synthetic, multi-layered, abstract thinking about architectural concepts that lead to their implementation in architectural projects through increasingly complex multidisciplinary relationships today.		
Content of the subject The theoretical part of the lectures is divided into thematic units that comparatively research the history and theory of modern and contemporary architecture in the world and Serbia and the wider region of the former Yugoslavia. The practical part is conducted as consultations for the writing and communication of scientific research, which can be applied in scientific conferences locally and abroad. While working on the course, students simulate announcements at a scientific conference through presentations of research and scientific discussions in a group of course participants, and teachers as moderators.		
Recommended literature - Recommended literature is determined subsequently in relation to the specificity of individual research of each student and is determined.		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures The teaching methods include mainly <i>ex-cathedra</i> lectures, but also mentoring, lectures, presentations, and exams.		
Evaluation of knowledge (maximum number of points 100) Activity during semester and presentation (practical part of the exam) / 50 points 1. Final paper (theoretical part of the exam) / 50 points		

Name of the subject: ARCHITECTURE AND MODERNITY		
Teacher(s): Luka P. Skansi, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 2 nd semester		
Goal of the subject Goal of the course is to instruct doctoral students in understanding the development of the concept of modernity in architecture through articulated introduction of the following terms: tectonics, development of thought, style, technique, function, construction, space. Concepts, which developed between the 19th and 20th centuries as new instruments and new methodologies in architecture and as new subjects in the conceptualization of architectural thought, and which still represent the hallmark of every architectural project.		
Outcome of the subject The course must enable students to articulate the contextualization of architecture, to shape their analytical skills in reading an architectural object and to bring their research to an adequate conceptualization.		
Content of the subject <i>Theoretical education</i> In recent years, the notion of the uniqueness of the modern movement in architecture and urbanism has been increasingly questioned, and modernism itself has become a multivalent, even contradictory category. Part of this complexity will be reflected in lectures that seek to portray a particular character, movement, theme, or ideology in a specific context — most often the Yugoslav context of the 20th century — comparing it to contemporary international tendencies, which have proven to be key centres of architecture. <i>Practical education</i> Elective seminar paper on a specific topic that the teacher will suggest. Through individual consultations, seminar papers will be directed towards the creation of an original scientific contribution.		
Recommended literature - Martino Stierli, Vladimir Kulić (ur.), <i>Toward a Concrete Utopia: Architecture in Yugoslavia 1948-1980</i> , The Museum of Modern Art, New York, 2018. - Lukasz Stanek, <i>Architecture in Global Socialism: Eastern Europe, West Africa, and the Middle East in the Cold War</i> , Princeton NJ: Princeton University Press, 2019. - Luka Skansi (ur.), <i>Na međi umetnosti i inženjerstva. Studije o posleratnoj arhitekturi u Beogradu i Srbiji</i> , Arhitektonski fakultet Univerziteta u Beogradu, Beograd 2020 (u objavi).		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures The teaching methods include mainly <i>ex-cathedra</i> lectures, but also mentoring, lectures, presentations, and exams.		
Evaluation of knowledge (maximum number of points 100) Points earned during the semester: 30 Points earned through seminar paper: 70		

ELECTIVE COURSES
STUDY UNIT RESEARCH DISCOURSES –
ELECTIVE SEMINAR

Name of the subject: CONTEMPORARY THEORY OF ART AND SPACE STUDIES		
Teacher(s): Miodrag P. Šuvaković, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 3 rd semester		
Goal of the subject Introduction to contemporary art theories, cultural studies and media studies. Introduction to the topics, methods and applications of art theory in the study of aesthetic spaces in art, culture and architecture. Introducing stylistic, discursive, visual and affective analysis of aesthetic spaces in the late twentieth and twenty-first-century art. Introduction to contemporary literature on art theory, culture and media.		
Outcome of the subject Mastery of theoretical knowledge to the comparative interpretation of specific artistic, cultural, media and architectural spaces. Applicable knowledge of space theory from the point of view of art, culture and media theory in relation to selected case studies from artistic installations, artistic environmental works to architectural realizations. Mastering the discourses of contemporary art, culture and media theory.		
Content of the subject 1. Concepts of contemporary art, culture and media 2. Paradigms of contemporary art theories 3. Paradigms of contemporary cultural theories 4. Paradigms of contemporary media theories 5. Theories of space: from geometric to urban and ecological space 6. Debate with students on selected literature 7. Space theories: aesthetics of installation art 8. Theory of environmental art 9. Theory of art, sculpture and space by Rosalind E. Krauss 10. Theory of virtual/digital space 11. Spatial turn: conditions, reasons, and critical effects 12. Cognitive mapping of places and non-places - junk space by Robert Smithson, Rem Koolhaas, Hal Foster 13. Representations of the space: diagrams, photography and digital media 14. Spaces of power and nomadic spaces - dialectical turns 15. Debate with students on selected literature		
Recommended literature - Đokić, Vladan, Petar, Bojanić (prir.), Misliti grad, Arhitektonski fakultet, Beograd, 2011. - Harvey, David, Spaces of Capital / Towards a Critical Geography, Routledge, New York, 2001 - Jameson, Frederic, The Geopolitical Aesthetics. Cinema and Space in the World System, Indiana University Press, Bloomington, 1995 - Kitler, Fridrih, Optički mediji: Berlinska predavanja 1999. godine, FMK, Beograd, 2018 - Koolhaas, Rem, Foster, Hal, Junkspace with Running Room, Nothing Hill Editions, London, 2012 - Ože, Mark, Nemesta. Uvod u antropologiju nadmodernosti, Biblioteka XX vek, Beograd, 2005. - Papapetros, Spyros, Rose, Julian (prir.), Retracing the Expanded Field. Encounters between Art and Architecture, The MIT Press, Cambridge MA, 2014 - Smith, Terry, Art to come / Histories of Contemporary Art, Duke University Press, Durham, 2019 - Šuvaković, Miško, Konceptualna umetnost, Orion_Art, Beograd, 2012. - Šuvaković, Miško, Pojmovnik teorije umetnosti, Orion_Art, Beograd, 2012. - Šuvaković, Miško (prir.), Prolegomena za pojmovnik estetike, filozofije i teorije arhitekture, Orion_Art, Beograd, 2017. - Tally, Robert T., Spatiality, Routledge, London, 2013		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Theoretical lectures and case studies; discussions of selected theoretical texts; debates with students.		
Evaluation of knowledge (maximum number of points 100) class attendance 10 points; participation in two debates 10 + 10 points; power point presentation 20 points; written seminar paper 30 points; oral presentation 20 points.		

Name of the subject: HISTORY, PHILOSOPHY, SCIENCE AND TECHNOLOGY		
Teacher(s): Branko M. Mitrović, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 3 rd semester		
Goal of the subject The course introduces students to the philosophical problems of architectural theory throughout history. At the same time, through writing a seminar paper and preparing a presentation, students are introduced to the technique of scientific presentation.		
Outcome of the subject The course is conceived according to the model of general presentation and as a result, students should gain a general picture of the philosophical background of the problem of architectural theory.		
Content of the subject <i>Theoretical education</i> The subject is conceived as a block of nine teaching units, each of which can consist of one or more lectures (Introduction, Theories of Visuality, Ontology, Essentialism, Enlightenment and Kant, Romanticism, Phenomenology and Hermeneutics, Deconstruction, Object-Oriented Ontology). <i>Practical education</i> Preparing students for writing a scientific paper. Presentations.		
Recommended literature - Branko Mitrović, Philosophy for Architects - Branko Mitrović, Visuality for Architects - Mark Gage (ed.), Aesthetic Theory		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures The teaching methods include mainly <i>ex-cathedra</i> lectures, but also mentoring, lectures, presentations, and exams.		
Evaluation of knowledge (maximum number of points 100) 40 points: presentations 60 points: seminar paper		

Name of the subject: YUGOSLAV CULTURAL SPACE		
Teacher(s): Radina M. Vučetić, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 3 rd semester		
Goal of the subject The aim of the course is for students to define their research topic, and to use methodological and theoretical knowledge, with critical analysis of literature in the field of history, art and architecture, to write independent research work that will show understanding of the historical context for wider reflection on Yugoslav architecture and urbanism.		
Outcome of the subject At the end of the course, students are expected to understand the complex relationship between history, art and architecture and to recognize the importance of the historical context for understanding the architecture and urbanism of the 20th century in our area. In addition, through understanding the importance of the Yugoslav space, students will acquire new knowledge from the history of Yugoslavia, and the history of architecture and urbanism in the 20th century.		
Content of the subject <i>Theoretical education</i> What was Yugoslavia (space, ideas, people, significance of cultural space), Yugoslav cultural space - the Kingdom of Yugoslavia, Yugoslav cultural space - socialist Yugoslavia, Yugoslav cultural space in practice: Yugoslav art exhibitions; Ivan Meštrović, Yugoslav Cultural Space in Practice: Yugoslav Socialist Modernism (from its origins to the exhibition at MoMA), Export of Yugoslav Socialist Modernism: EXPO 58, Yugoslavia in the Third World. <i>Practical education</i> Classes at the seminar include combining the history of Yugoslavia with lectures at locations that are important for placing certain architectural directions / buildings / monuments in the historical context (Knez-Mihailova Street, Terazije, Nikola Pasic Square, Kneza Milos Street, Sajmiste, former Central Committee building / Usce Palace , SIV, Museum of Contemporary Art, New Belgrade, Museum of Yugoslavia). Within the seminar, each student will work on an independent research project related to a particular architectural direction / object / monument, which will show the importance of the historical context for understanding Yugoslav architecture and urbanism of the 20th century.		
Recommended literature <ul style="list-style-type: none"> - Blagojević, Lj., Novi Beograd. Osporeni modernizam, Beograd 2007. - Denegri, J., Jedna moguća istorija moderne umetnosti. Beograd kao internacionalna umetnička scena, Beograd 1998. - Dimitrijević, B., Potrošeni socijalizam. Kultura, konzumerizam i društvena imaginacija u Jugoslaviji, Beograd 2016. - Erdei, I., Dimitrijević, B., Toroman, T., Jugoslavija: Zašto i kako?, Beograd 2019. - Ignjatović, A., Arhitektura sokolskih domova u Kraljevini SHS i Jugoslaviji, Beograd 2015. - Janjetović, Z., Od internacionale do komercijale. Popularna kultura u Jugoslaviji 1945-1991, Beograd 2011. - Jović, D., Jugoslavija – država koja je odumrla. Uspon, kriza i pad Četvrtre Jugoslavije, Beograd 2003. - Jugoslavija u istorijskoj perspektivi, Beograd 2017. - Kolečnik, Lj. (ur.), Socijalizam i modernost. Umjetnost, kultura, politika, 1950-1974, Zagreb 2912. - Kulić, V., Bogdanović by Bogdanović: Yugoslav War Memorials through the Eyes of Their Architect, New York 2018. - Lempi, Dž. R., Jugoslavija kao istorija. Bila dvaput jedna zemlja, Beograd 2004. - Manojlović-Pintar, O., Arheologija sećanja. Spomenici i identiteti u Srbiji 1918-1989, Beograd 2014. - Marković, P., Beograd između Istoka i Zapada 1948-1965, Beograd 1996. - Prpa, B., Srpski intelektualci i Jugoslavija 1918-1929, Beograd 2018. - Sekulić, Dubravka, Izgradnja nesvrstanosti, Beograd 2016. - Stierli, M., Kulić, V., Toward a Concrete Utopia: Architecture in Yugoslavia, 1948-1980, New York 2018. - Thaleer, W., Mrduljaš, M., Kulić, V., Modernism in Between: The Mediatory Architectures of Socialist Yugoslavia, Berlin 2012 - Todić, M., Fotografija i propaganda: 1945-1958, Beograd 2005. - Vahtel, E., Stvaranje nacije, razaranje nacije: književnost i kulturna politika u Jugoslaviji, Beograd 2001. - Vučetić, R., Koka-kola socijalizam. Amerikanizacija jugoslovenske popularne kulture šezdesetih godina 20. veka, Beograd 2012. 		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Theoretical lectures, Independent research work		
Evaluation of knowledge (maximum number of points 100) Independent research work (seminar paper 3500 words) 70 points and oral defence of independent research work 30 points		

Name of the subject: SPATIAL COGNITION		
Teacher(s): Vasilije P. Gvozdenović, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 3 rd semester		
Goal of the subject Introducing students to the touch, common points, and problems of architecture and psychology as a science through the study of visual cognition.		
Outcome of the subject At the end of the course, the student will have a clear overview of the relevant psychological phenomena related to the problems of perception of space, the space-individual relationship, as well as the basic cognitive mechanisms underlying this relationship.		
Content of the subject <i>Theoretical education</i> Introduction to Psychology. Basic methodological procedures. Data collection techniques. Hypothesis setting. Space perception. Time perception. Object perception. Theories and approaches. Visual memory. <i>Practical education</i> Trial research, work on the design, problem and hypotheses of the research, data collection instrument trials.		
Recommended literature <ul style="list-style-type: none"> - V. Gvozdenović, (2016). Metode i tehnike u eksperimentalnoj psihologiji, Akademska misao, Beograd. - V. Gvozdenović, (2016). Različiti pristupi problemu mentalnih reprezentacija, Akademska misao, Beograd - B. Goldstein, (1998). Sensation and Perception. (odabrana poglavlja). 		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Lectures, discussions, interactive exchange of content and suggestions		
Evaluation of knowledge (maximum number of points 100) Project presentation, 30 / defense of research project 70 points		

Name of the subject: ENVIRONMENT AS A SPACE OF INTERACTION AND LEARNING		
Teacher(s): Violeta R. Orlović Lovren, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 6		
Condition: Enrolled 3 rd semester		
Goal of the subject Contribution to considering of environment as a totality of natural, human and built components, its dynamic interrelations and implications on learning in various settings.		
Outcome of the subject Components of environment identified from holistic and dynamic perspective; Difference between the linear, systems' and integrated approaches to an understanding of environment recognized; Implications of complex and dynamic relations on learning in different settings seen within the human/environment interaction. Local environmental issues analyzed and learning space projected from the perspective of human/ environment interactions		
Content of the subject <i>Theoretical education</i> The concept of the environment. Different approaches to observing the human-environment relationship. Ecocentrism, anthropocentrism, anthropocene. Ecomodernism. Linear, systemic and integral approaches. The environment in the concept of sustainable development. Areas of biological, social and cultural diversity. Local environment as a space for learning. Learning communities. Learning cities. Protected natural areas as a learning space and a model of sustainability. Environmental rights, traditional and modern knowledge. Environmental risks and learning for community resilience. <i>Practical education</i> Choosing space as a unit for monitoring human interactions - environment. Analysis of interactions and opportunities for mutual learning. Selection of a unit for analysis of interactions between humans and the rest of the environment. Identifying one local environmental issue in that particular area. Analysis of causes and consequences as well as of possible solutions, respecting rights of all the actors and wellbeing of all the environmental components. Projecting of spaces for mutual learning and strengthening of community resilience in a particular area.		
Recommended literature <ul style="list-style-type: none"> - Blewitt, J.(2006).The Ecology of Learning: sustainability, lifelong learning and everyday life. London: Earthscan - Clover,E.D.,Jayme O.B.,Follen,Sh.and Hall,B.(2010).The Nature of Transformation: Environmental Adult Education,Victoria: University of Victoria. - Group of authors (2015). An Ecomodernist Manifesto. www.ecomodernism.org - Mc Donough, W., Braungart, M.(2002). Cradle to Cradle: Remaking the Way We Make Things, New York: North Point Press - Meadows, D., Randers, J. , Meadows, De. (2004). Limits to Growth: The 30-Years Update, US: Chelsea Green. - Meadows, H.D.(2008). Thinking in Systems: A Primer, ed. by Dianna Wright, US: Sustainability Institute. - Orlović-Lovren,V.,Maruna,M.,Crnčević,T.(2016). Contributing towards more sustainable cities—Learning through collaboration. In Leal Filho et al (Eds.) Engaging Stakeholders in Education for Sustainable Development at University Level. Springer - Crnčević,T.,Orlović Lovren,V. (2018). Displacement and climate change: improving planning policy and increasing community resilience. International Journal of Climate Change Strategies and Management, Vol. 10 Issue: 1, pp.105-120, https://doi.org/10.1108/IJCCSM-05-2017-0103 - Orlovic Lovren V. (2019) Traditional and Indigenous Knowledge: Bridging Past and Future Sustainable Development. In: Leal Filho W., Azul A., Brandli L., Özuyar P., Wall T. (eds) Life on Land. Encyclopedia of the UN Sustainable Development Goals. Springer, Cham - Orlovic Lovren,V. (2018). Learning for Sustainability through Community Involvement in Protected Area Governance. Andragoške studije, issn 0354–5415, broj 11, decembar 2018, str. 9–28. - Ponting,K. (2009). Ekološka istorija sveta. Beograd: Odiseja. - Saks,Dž. (2014) Doba održivog razvoja. Beograd: Centar za međunarodnu saradnju i održivi razvoj i JP Službeni glasnik - Washington H, Taylor B, Kopnina H, Cryer P and Piccolo JJ (2017) Why ecocentrism is the key pathway to sustainability. <i>The Ecological Citizen</i> 1: 35–41. 		
Number of active classes: 4 (1+3)	Theory: 1	Practice: 3
Methods of delivering lectures Lectures, discussion, project learning, small groups work, “flipped classroom”		
Evaluation of knowledge (maximum number of points 100) Presentation of the project: 40 Seminar (Written paper): 60		

ELECTIVE COURSES
STUDY UNIT RESEARCH LABORATORY –
MINOR RESEARCH PROJECT

Name of the subject: ОПТИМАЛНО ПРОЈЕКТОВАЊЕ ОСВЕТЉЕЊА У АРХИТЕКТУРИ		
Teacher(s): Lidija S. Djokić, PhD, Full professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The goal of the course is for the students to become acquainted with the methods for achieving optimal lighting conditions along with energy-efficient solutions. Topics that will be studied include lighting quality factors and lighting effects, existing lighting technologies and design criteria that enable optimal combination of daylight and artificial lighting, focusing on the most appropriate light control.		
Outcome of the subject It is expected that through the research the students will become able to design optimal lighting solutions on their own, based on the achievement of adequate lighting conditions with the application of energy-efficient light control.		
Content of the subject Comprehensive understanding of theoretical aspects. Research aimed at achieving optimal lighting in specific spaces.		
Recommended literature It will be specified in agreement with the professor.		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Lectures, presentations, group analysis and discussions, as well as individual consulting.		
Evaluation of knowledge (maximum number of points 100) Research work: 50 points Presentation of the methodology, results and conclusions: 50 points		

Name of the subject: FORM, FUNCTION AND MATERIALIZATION OF ARCHITECTURAL SPACE		
Teacher(s): Jelena A. Ivanović Šekularac, PhD, Full professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The main objective of the course is to apply methodological frameworks of knowledge and theoretical teaching through a small research project related to the doctoral dissertation topic in the field of technical and technological sciences, and through a specific subject of research in the field of architectural technologies. Training students for scientific research and solving practical and professional problems in the field of architectural structures and the materialization of architectural space is extremely important. The objective of the course is to achieve scientific skills, critical thinking and academic skills in the field of architectural structures, materials and physics of buildings to develop a student's creative skills and to master specific practical skills.		
Outcome of the subject The outcome of the course is the acquisition of the student's ability to apply all the theoretical and practical knowledge acquired to a specific task and the specific problems that they deal with in this research, as part of a small research project on doctoral studies, and which are necessary to continue successful work on the doctoral dissertation, concerning the materialization of an architectural object. The outcome of the course represents the student's ability to identify and define research problems as well as appropriate research methods and application of all the acquired knowledge and skills in the field of architectural technologies and doctoral studies. The research goal in the field of architectural structures, and in general in the field of architectural technologies, is making an adequate choice and the right final decision on the topic of doctoral dissertation research.		
Content of the subject Influence of constructive solution and materialization of architectural space on architectural work. The influence of the function of an architectural object on the choice of constructive solution and the materialization of architectural space. Construction technology and architectural detail. The topic of the research will be chosen together with the student and will influence further work on the dissertation and concrete formulation of the research framework. The student's research work is carried out through the verification and improvement of the acquired theoretical knowledge in the field of architectural technologies. Directing the student to research work on a selected topic. Different forms of research, depending on the specific topic, represent a narrow area of research for which the student is interested and represents research that precedes further research work and the preparation of a doctoral dissertation. This research will cover the methodological procedure carried out in the scientific research: literature analysis, previous research in this field, field observation, conducting the entire research process by different methods and systematizing the results obtained, analyzing them and comparing and drawing conclusions. As a result of the methodology implemented in this way, a new understanding of the issues that the student deals with in their research is obtained. The research conducted according to this model is a check of the research methodology to adequately select and make a decision on the topic of the doctoral dissertation.		
Recommended literature Depending on the topic of interest that the student is interested in and the agreed research framework, the literature that is necessary for a specific thematic research will be defined and recommended.		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Classes are conducted through various forms of work such as ex-cathedra lectures, interactive forms of teaching, discussions with active student participation; independent research work with the coordination of professors, case studies, consultations, development of a research project.		
Evaluation of knowledge (maximum number of points 100) Activity during the development of a small research project (30 points) + final research project (50 points) + project presentation (20 points)		

Name of the subject: SIMULATION OF ENERGY PERFORMANCE OF BUILDINGS		
Teacher(s): Aleksandar N. Rajčić, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject Acquaintance with software tools that can be used in the processes of modelling and calculating the energy performance of buildings, with a comparative analysis of the use and results obtained on selected examples of completed and designed buildings.		
Outcome of the subject Understanding the complex links between what can be predicted by an architectural project, what needs to be or needs to be done from a local regulatory point of view, as well as in terms of achieving modern energy performance in order to use software tools that can quantify it. Critical comparison of tools and adoption of software appropriate to project tasks and adequate regulation.		
Content of the subject Fundamentals of building physics and energy efficiency of buildings. Basic regulation. Calculation methods and simulation. Software Used Today - Features and Limitations. Basics of building typologies. Energy characteristics of certain types of buildings. Opportunities when designing new or renovating existing buildings. Energy remediation. Zero energy buildings. Current situation in Serbia. Research dedicated to available budgeting and energy simulation software. Selection of typological representative buildings, where design activities and energy calculations and simulations will be performed. Comparison of mode of operation and results of work. BIM and tools for calculations and simulations.		
Recommended literature <ul style="list-style-type: none"> - https://energyplus.net/ - https://designbuilder.co.uk/ - https://www.arch2o.com/energy-simulation-tools-used-in-architectural-practice/ - https://www.autodesk.com/autodesk-university/class/Energy-Analysis-Revit-How-Guide-2014 - https://www.aearch.com/knaufterm3d 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Lectures, seminars and discussions with the active participation of students; consultations; final work		
Evaluation of knowledge (maximum number of points 100) Activity during class 30 points, final thesis (project with study) 70 points		

Name of the subject: TYPOLOGICAL STRUCTURING AND IMPROVEMENT OF BUILDING FUND		
Teacher(s): Dušan M. Ignjatović, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject <p>The main goal of the course is to get acquainted with the methodological approach of Typology as a basis for adequate analysis of the building stock and the modalities of its management. The research is being carried out within the framework of the ongoing Scientific research project: Development of an energy typology of residential buildings of the City of Belgrade, and which continues through the project: Development of an energy and energy typology of buildings with specificities in the Municipalities in the City of Belgrade.</p> <p>The goal of the course is to understand the logic of a building stock tailored for a certain spatial level (City of Belgrade, municipalities, smaller spatial zones...), and to understand all relevant relationships (diversity, density, representation, performance, characteristics...) by determining of the model (representative) buildings and analyzing their material and technical elements.</p> <p>The goal of the course is to formulate an individual research question within the project and to explicate the research flow by a scientific apparatus adapted to the level of doctoral studies.</p>		
Outcome of the subject <p>The outcome of the course is mastering the methodological apparatus of Typologies and understanding the possibilities of its application at different levels (object, representative type, age, matrix ...) and for different potential users (individual, managerial, investor, managerial).</p> <p>The outcome of the project is the formulation of a research stream in the field of building stock management (from structuring, through analysis to formulating management modalities and corresponding strategic actions)</p> <p>The outcome of the case is an exploratory study that can be formulated in the form of a project report or in the form of a scientific paper prepared for publication in a scientific journal from the SCSJ list.</p>		
Content of the subject <p>Typology: concept, principles, definition, database, structure, possible approaches of analysis</p> <p>Existing state: statistical relevance, model buildings, characteristics</p> <p>Variants and levels of improvement, principles, achievements, limitations, referentiality, replicability</p> <p>Individual research (typological, phenomenological, material, energetic, strategic...)</p> <p>Analysis of approaches, opportunities, limitations, research flow. Result analysis, evaluation</p> <p>Analysis of typological matrix, possible directions of research.</p> <p>Selection of individual research field</p> <p>Formulating a research question, defining the subject, scope and flow of research</p> <p>Formulating a report or scientific paper</p>		
Recommended literature		
<ul style="list-style-type: none"> - Jovanovic Popovic, M. Ignjatović, D. ed (2013). National typology of residential buildings of Serbia Belgrade: Faculty of Architecture, University of Belgrade and GIZ - Typology Approach for Building Stock Energy Assessment. (2012) Main Results of the TABULA project – Final Project Report – TABULA Project Team, IWU, Darmstadt - Energy and Buildings, Special issue, EPISCOPE, Volume 132, Pages 1-154 , 2016 - Giebeler G., Krause H., Fisch R., Musso F. (2005): Refurbishment Manual, Birkhauser 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures <p>Ex-cathedra lectures, presentations, case studies, seminars</p>		
Evaluation of knowledge (maximum number of points 100) <p>Candidate Presentation (30), Research Study - Scientific Journal Article (70)</p>		

Name of the subject: SUSTAINABLE BUILT ENVIRONMENT		
Teacher(s): Nataša D. Čuković Ignjatović, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The small research project aims to provoke a new contextualization of the research question through the participation of the student in actual commissioned research, complementary to the chosen field of research. By engaging in national and international multidisciplinary project activities, besides specific research experience, the student also has the opportunity to conduct a part of his research with partner institutions through the work on this subject, as well as to present the research results in the form of scientific work in cooperation with project team members.		
Outcome of the subject The outcome of the course is the student's verified ability to carry out focused research that is complementary to the work of a multidisciplinary, team. The teacher guides the student through the research process so that the results of a small research project are presented in the form and structure of work ready for publication in a scientific journal (preferably in collaboration with other team members).		
Content of the subject The minor research project is implemented through part of project activities that seek a holistic approach to the problem of sustainable construction to ensure a high quality of life in the built environment, accessible to the broadest population and sustainable in the long term in ecological, economic and cultural terms. The project framework for the realization of the course is: <ul style="list-style-type: none"> • Horizon2020 European Partnership <i>People-centric sustainable built environment (Build4People)</i> • Development and testing of the European <i>Level(s)</i> platform for green and sustainable construction. The platform is being developed to integrate regulations, standards and procedures in this field across the EU and more than 100 academic institutions, project bureaus, contractors and producers are currently participating in its formation. https://ec.europa.eu/environment/eussd/buildings.htm • Defining a narrower topic and subject of research; • defining goals and expected results; • research work - independent and teamwork; • verification of the results obtained; • summarizing and presenting the results obtained 		
Recommended literature To be defined after the formulation of individual topics		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures interactive forms of teaching, case analysis, smaller research projects, presentations, writing a scientific paper, workshops, shorter thematic lectures.		
Evaluation of knowledge (maximum number of points 100) semester work (work reports per research phase) 2 x 25 = 50 final thesis (presentation of the obtained results in the form of scientific work) 50		

Name of the subject: COMPLEX ISSUES IN ARCHITECTURAL DESIGN		
Teacher(s): Nenad D. Šekularac, PhD, Full professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject Consideration of different possibilities of structural solutions in order to find the optimal structural solution of an architectural object. Solving practical and theoretical problems in the field of architectural engineering. Training the student to acquire and implement new knowledge in the field of structural statics on concrete examples of architectural objects, with the aim of rational application of the structural assembly. Acquisition and improvement of knowledge on the application of modern principles of constructive solutions in the rehabilitation and reconstruction of buildings. The objective of the course is to develop scientific skills, critical thinking and academic skills, as well as to develop the students' creative abilities and master specific practical engineering skills to independently conduct original and scientifically relevant research in the field of architectural engineering.		
Outcome of the subject Research in the field of architectural engineering, to acquire the student's ability to make adequate choices and to make a final decision on the topic of doctoral dissertation research.		
Content of the subject The influence of construction on architectural form. Influence of architectural object function on a constructive solution. Influences of the form and function of an object on the choice of a structural solution in the design, reconstruction and rehabilitation of high-rise buildings. The interaction of the structural solution and the materialization of the structural element. Problems of reconstruction and rehabilitation of buildings, presented through methods of constructive rehabilitation of buildings, research from the aspect of static-structural protection, materialization and details. The student's research work is carried out through the examination and deepening of the acquired knowledge in the lectures in the field of architectural engineering. Introduction to the research process. Different forms of research, depending on the specific topic, represent a narrow field of research for which the student is interested and which directly contributes to his research in further specialized teaching and the preparation of his doctoral dissertation. This research includes analysis of literature, analysis of previous research in this area, research of archival material, observation methods in the field, all to acquire new knowledge about the problems that the student deals with in researching a specific problem. This research is conducted to make an adequate choice and make a final decision on the topic of the doctoral dissertation.		
Recommended literature Depending on the individual topic of the research project, the student will define the literature with the teacher. Preferably, the literature covers the following thematic groups: 1. Literature related to the thematic framework of the research project; 2. Literature in the field of research methodology; 3. Literature in the field of designing structural systems and spatial structures; 4. Literature in the field of generation and optimization of structural systems and spatial structures; 5. Literature in the field of structural systems and spatial structures analysis.		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Teaching is carried out through a number of different forms of work such as ex-cathedra lectures, interactive forms of teaching, reference to the research process, discussions with active student participation; independent research work with the coordination of mentors, case analysis, experimental research in research laboratories, consultations, development of a research project, consultations. It implies active participation of students in the realization of the syllabus.		
Evaluation of knowledge (maximum number of points 100) Activity during the development of a small research project (30 points) + final research project (50 points) + project presentation (20 points)		

Name of the subject: MORPHOLOGY AND TYPOLOGY OF THE CITY		
Teacher(s): Vladan A. Djokić, PhD, Full professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject Introduction to the research problem leading to the PhD thesis - the improvement of scientific competencies and academic skills, alignment of the topic with contemporary directions of development of the discipline in the world, promotion of the multidisciplinary approach to contemporary topics dealing with the phenomena of morphology and typology of urban spaces.		
Outcome of the subject Introduction to the complex phenomenon of morphology and typology of urban spaces. Training for the typological perception of morphological characteristics of urban spaces based on key characteristics. Demonstration of understanding the process of forming guidelines for the development and transformation of morphological patterns of urban spaces.		
Content of the subject General determinants of typology The character of typological research in architecture and urbanism General determinants of morphology Principles of morphological research in architecture and urbanism Cooperation of typology and morphology Theoretical supports and practical application		
Recommended literature <ul style="list-style-type: none"> - Vidler, Anthony. "The Third Typology", Design Cities. Oxford: Blackwell (2003): 317-322. - Kelbaugh, Douglas. "Typology: an Architecture of Limits". Urban Design Reader (2002): 83-97. - Colquhoun, Alan. "Typology and Design Method". Theorizing a New Agenda for Architecture. Princeton: Princeton Architectural Press, (1996): 250-257. - Argan, Giulio Carlo. "On the Typology of Architecture". Theorizing a New Agenda for Architecture. Princeton: Princeton Architectural Press, (1996): 242-246. - Whitehand, J.W.R. (ed.) The Urban Landscape: Historical Development and Management, Papers by M.R.G. Conzen, London, Academic Press, 1981. - Duany, Andres., Elizabeth Plater-Zyberk, and Chester E. Chellman. "New Town Ordinances and Codes". New Classicism, Omnibus Volume. New York: Rizzoli, (1990): 239-243. - Ђокић, Владан. Урбана морфологија: град и градски трг, Архитектонски факултет Универзитета у Београду, Београд, 2004. - Ђокић, Владан. Урбана типологија: градски трг у Србији, Архитектонски факултет Универзитета у Београду, Београд, 2009. 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Teaching takes place through discussions with students, and the development of a research project. The research project consists of two phases: the phase of theoretical setting and the phase of practical verification of the theoretical setting on a specific polygon. The theoretical setting presents a typological-morphological rulebook that determines the principles and guidelines for the urban-architectural compositional solution of the selected polygon. The proposed recommendations should have an appropriate degree of determination which on the one hand enables adequate typological classification of all elements of which the composition consists, while on the other hand, it does not limit creativity in forming a compositional solution. The selected polygon is a spatially functional whole that has the characteristics of uniqueness within which different morphological-typological elements of constructed structures and open spaces appear.		
Evaluation of knowledge (maximum number of points 100) Research project (oral defense)		

Name of the subject: PARTICIPATORY URBAN DESIGN AND PARTICIPATORY PUBLIC ART		
Teacher(s): Zoran N. Djukanović, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject Introducing students to the complex relationships traditionally established between cities between two major and important social practices: art and urbanism, with particular reference to contemporary interdisciplinary artistic, planning and design practices that are realized in contemporary cities and in contemporary urban life.		
Outcome of the subject Enabling students to understand and interdisciplinary research into a specific segment of the public domain, within which art and urban design, as two large and important social fields, are realized, that is, the public and its participatory practices in the field of urbanism and art, that is, public art and urban design, and more specifically, participatory public art as a vital and desirable means of amplifying the effects of urban design with many positive effects.		
Content of the subject In countries with a long tradition in the field of public art, programs implemented in this field are closely linked to urban design practices and are often implemented through full citizen participation, implemented, at various levels and with many positive effects. Participatory mechanisms initiate events and activities to achieve a better understanding of public art and better integration of art into the public space, and the public domain in the broadest sense, ie closer and fuller integration into the daily life of the community and the city system as a whole. Urban design and public art in cities are those urban practices that are implemented predominantly in open urban spaces, specifically in public urban spaces. Phenomena such as: 1) urban design, 2) public art, and 3) urban open spaces, 4) cultural citizenship, and 5) cultural policies, institutions, and economies, necessarily establish relationships, if not planned or through design, then they correlate spontaneously, at the level of daily life, daily routines and the specific value system of the local community. Theoretical teaching is aimed at familiarizing with the mechanisms of establishing relations between these phenomena, through a wide range of topics between theoretical starting points and practical effects of the application of public art in the urban design of open public spaces, both on the quality of urban spaces and the quality of life in the city. Research and analysis of the purpose, opportunities, scope and procedures of using participatory public art in the urban design of open, and especially public, open city spaces. Research involves training students to use more scientific methods: the comparative method; case studies; content analysis method; method of theoretical-critical analysis of works in the fields of: a) urban design theory, b) social and urban theories, v) space theories, g) education theories, d) art theories; observation method; modelling method; method of analysis/synthesis, induction/deduction, classification and generalization.		
Recommended literature <ul style="list-style-type: none"> - Bishop, C. (2012) <i>Artificial hells: Participatory Art and the Politics of Spectatorship</i>, London - New York, Verso - Carmona et al., (2008) <i>Public Places - Urban Spaces</i>. London, Architectural Press - Cartiere, C. and Willis, S. (2008) <i>The Practice of Public Art</i>, New York, Routledge - Ђукановић З. (2016) <i>Употреба партиципативне јавне уметности у урбаном дизајну (докторска дисертација)</i> Архитектонски факултет Универзитета у Београду; Београд - Ђукановић, Z. and Cecchini, A. (eds.) (2019) <i>Wine cellars of Negotin – Participatory Urban Design</i>; Istituto Italiano di Cultura di Belgrado - Ђукановић З., Бобић А., Живковић Ј., и други; (2011) <i>Уметност у јавном простору: експертска студија просторне провере ужег градског језгра Ужица за потребе уметничке продукције у јавном простору</i>; <i>Academica – академска група</i>; Београд - Fleming, R. (2007) <i>The Art of Placemaking: Interpreting community through public art and urban design</i>. London, Merrell. - Gehl, J. and Svarre B. (2013) <i>How to study public life</i>, Washington D.C.: Island Press - Lefebvre, H. (1974) <i>La production de l'espace</i>, Paris: Anthropos. izdanje na engleskom 1991 <i>The Production of Space</i>, Donald Nicholson-Smith trans., Oxford: Basil Blackwell - Lefebvre, H. (1968) <i>Le Droit à la ville</i>, Paris: Anthropos (2nd ed.); Paris: Ed. du Seuil, Collection "Points" енглеско издање "The Right to the City" у (1996) <i>Writings on Cities</i>, E. Kofman and E. Lebas, trans. and eds., Oxford: Basil Blackwell. - Мако, V. (2009) <i>Estetika – Архитектура, knjiga 2: kreativni proces između subjektivnog i opšte-društvenog estetskog značenja</i>, Beograd, Архитектонски факултет Универзитета у Београду и Orion Art, 2009. - Heidegger, M. (1950) "Der Ursprung des Kunstwerkes" у <i>Holzwege, Gesamtausgabe Volume 5.</i>, енглеско издање "The Origin of the Work of Art" у Young J., Haynes, K. ed. (2002) <i>Off the Beaten Track</i>, Cambridge: Cambridge University Press, - Serra, R. (1994). <i>Titled Arc Destroyed</i>, у <i>Writings, Interviews</i>, Chicago: Chicago University Press 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures: mentoring, lectures, presentations, field research, stakeholder work, in situ experiment, study trips		
Evaluation of knowledge (maximum number of points 100) / Activity and work during the semester: 30 points in total / Seminar paper (theoretical part of the exam): 30 points in total / Final exam (practical part of the exam): 30 points in total / Teacher impression: 10 points total		

Name of the subject: DESIGN, PLANNING AND REGENERATION OF OPEN PUBLIC PLACES		
Teacher(s): Aleksandra M. Djukić, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The curriculum to explore a range of critical frameworks and research methodologies for a successful urban redesign of open public places. It integrates analytical methods, research design, a rigorous understanding of different methodologies and dynamics and an examination of broader social theories, morphological theories and identity. Students address complex systems that typically encompass an array of spatial, environmental, social, cultural, and economic factors. The emphasis is on theory, analysis, and practical application. The work in a small research project emphasizes the development of fundamental research competence, flexibility in the urban design of a special area of study, and encouragement of joint student/faculty research in a current research project. The program is tailored to the needs of individual students, each of whom works closely with a professor on a topic related to the research project.		
Outcome of the subject Each student is expected to demonstrate an understanding of the literature, theory, and research in a specialization area within the larger discipline of urban design. Ability to develop analytical and critical thinking and understanding and application of knowledge in practice; to participate in a research project; ability to recognize and evaluate ideas and cognition; the ability to prepare, process, interpret, and present data, using appropriate qualitative and quantitative techniques.		
Content of the subject Dynamic and active urban forms of open public places; Cultural and social characteristics; Climate change and open public places; Identity, humanity, visual perception; Open public spaces in shrinking cities as a catalyst for redevelopment; Placemaking; Digitalization of open public places; Different methodologies, methods and techniques of urban design for planning, design and redesign of open public places. Research of morphogenesis and transformation of open public places in a specific area (case study), typology and networks; Establishing criteria for an evaluation in relation to climate change, generative dynamics of change, identity, local context, possibilities for creative cultural tourism. Development of codes and scenario planning project to propose the future transformation of open public spaces against the selected criteria.		
Recommended literature <ul style="list-style-type: none"> - Abel C. (2000). Architecture and Identity: responses to cultural and technological change, Architectural Press, Oxford. - Bentley I.at.all(1985). Responsive Environments – A Manuel for Designers, Butterworth Architecture, Oxford. - Cliff Mougftin (2001). Urban Design – street and square, Architectural Press, Oxford. - Dovey K. (1999). Framing Places: mediating power in built form, Routledge, London, New York. - Fyfe R. N. (edit.) (1998). Images of the Streets, Routledge, London and New York. - Gehl, J Gehl, J. (2008). Life Between Buildings: using public space, Danish Architectural Press, Kopenhagen - Gehl, J. (2010). Cities for People, Island Press, Washington - De Certau (1984). The Practice of Everyday Life, University of California Press, Berkeley.. - Halbwachs M. (1950). La memoire collective, Les Presses universitaires de France, Paris. - Hayden D. (1995). The Power of Place: Urban Landscape as Public History, MIT Press, Cambridge. - Hillier B., Hansen J. (1989): The Social Logic of Space, Cambridge University Press. - Kostof, S. (1992). The City Assembled – The Elements of Urban Form Through History, A. Bulfinch Press - Book; Little Brown and Company, Boston. - Lynch K. (1984). Good City Form, The MIT Press, Cambridge., London. - Zukin S. (2000). The Cultures of Cities, Bleckwell Publishers, Oxford. 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Classes are conducted through interactive and multimedia lectures (ex-cathedra, conversation, surveys, studio work), independent research work of students during the semester (use of recommended literature and research), elaboration of acquired knowledge and their presentation (work during the semester and semester work after the semester ends).		
Evaluation of knowledge (maximum number of points 100) Pre-exam obligations 40 Exam (presentation of a project + written essay) 60		

Name of the subject: PUBLIC SPACE AND SUSTAINABLE DEVELOPMENT		
Наставник: Jelena A. Živković, PhD, Associate Professor; Ana Z. Nikezić, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The purpose of the course is to guide students in ways of exploring the role and importance of public spaces for sustainable urban development. Particular emphasis is placed on social production, the relational nature, and the individual practice of using these spaces. Public space is seen as a framework that allows for urban activities and influences the quality of life, and as such, is accepted, contested and adapted to different human desires, needs and interests. In addition, the course aims to provide insight into how knowledge about the relationship between public space and sustainable development is linked to urban design theories and how they affect the practice of urban design.		
Outcome of the subject Key outcomes of the course are gaining an understanding of the complex interrelationship of urban public spaces and sustainable development and empowering students to explore it independently. Students gain knowledge of existing theories and research methods relevant to discussing the relationship between production and features of public spaces on the one hand, and sustainable urban development on the other. Through the application of acquired knowledge, in working on a specific research problem and in a specific urban context, they acquire the skills to perform independent research work.		
Content of the subject In accordance with the conceptualization of urban space as relational, socially produced and appropriated and lived through everyday practice, and by adopting an interdisciplinary perspective to urban development, theoretical instruction is aimed at establishing relationships between three groups of theories: a) theories of space, place and space production; b) theoretical foundations for sustainable development; and c) urban design theory. In considering the relationship between public spaces and sustainable development, different types, sizes and locations of urban spaces are explored: central/peripheral, representative / marginal, built/natural... As particularly relevant to urbanism and architecture, special attention is dedicated to the issues of: a) the relationship between urban form and nature; b) pluralism of the use and meaning of public spaces; d) urban activism and creation of places: contesting and appropriating public spaces, as well as reviving and domesticating abandoned spaces through artistic interventions and recreational activities. Practical lectures - involves individual student work on a specific research problem of the relationship between urban public space and sustainable development. It covers the consideration of different theoretical positions, methods and techniques of research in order to help students form their own conceptual and theoretical framework and to choose an appropriate methodological apparatus, which are then applied in the study of a specific socio-spatial situation at the selected urban location.		
Recommended literature <ul style="list-style-type: none"> - Massey D. (2005) For Space, London; Thousand Oaks, Calif.: SAGE Publications Ltd - Lefevre H. (1991) Production of Space, Oxford UK, Cambridge, MA Blackwell - Lefebvre H. (1996) Writings on Cities, Oxford UK Cambridge, MA: Blackwell publishing - Madanipour A. (1996) Design of Urban Space: An Inquiry into a Socio-spatial Process, Chichester: John Wiley - Createau M. (1988) The Practice of Everyday Life, Berkeley: Univesity of California Press - Lynch K.(1981) A Theory of Good City Form, Cambridge, MA: MIT Press - Franck K. A., Stevens Q. (eds.) (2007) The Loose Space: Possibility and diversity in urban life, London, NY: Routledge - Gehl J. (1987) Life Between Buildings: Using Public Space, NY: Van Nostrand - Stevens Q. (2007) The Ludic City: Exploring the potential of public spaces, London, NY: Routledge - Elin N. (2006), Integral Urbanism, NY: Routledge - Hough M. (1995) Cities and Natural Processes, London: Routledge - Carmona M, Heath T., Oc T., Tiesdell S.(2003) Public Places Urban Spaces: The Dimensions of Urban Design, Oxford:: Architectural Press 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures: Mentoring, lectures, discussions, individual student research work.		
Evaluation of knowledge (maximum number of points 100): Midterm paper – 50; Exam: Final paper 50		

Name of the subject: PLANNING CULTURE AND POLICY DESIGN: A CRITICAL READING OF THEORY AND PRACTICE		
Teacher(s): Marija L. Maruna, PhD, Full professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The main objective of the project is a critical interpretation of the discipline of spatial development in Serbia through an integrated perspective that encompasses systemic structure and concrete planning practice. The specific objectives of the project are: - Review of scientific knowledge on specific topics of spatial development within the research scene in Serbia, - Understanding the relationship between traditional planning practice and the institutional framework that regulates spatial development and implements planning policies, - Understanding the relationship between planning practice and the social, political and economic context, - Identification of factors of institutional transformation of the planning system, - Systematization of locally specific knowledge on current topics in the field of planning and urban governance, - Positioning of locally specific knowledge in relation to the global research scene, - Dissemination of research results to the scientific community at the national, regional and international level.		
Outcome of the subject Acquiring competencies and developing skills for: - Reviewing the exploratory and practical value of different theories, concepts and strategies within the discipline of spatial development in Serbia, - Combining an interdisciplinary and integrative approach in the study of specific spatial development topics, - Conducting complex research through teamwork, - Generation of research results in order to design systemic solutions, solve specific problems and improve practice, - Critical assessment and analysis of the regulatory structure, governance processes and policy instruments that shape the development of cities in Serbia, Introducing to the scientific and expert public the results of the scientific research, general tendencies and key problems of the discipline.		
Content of the subject It goes through research work on a specific topic and covers all stages of a research project. Practical work includes in particular: Qualitative research; Descriptive research; Creating a database; Chronological classification of sources; Comparative analysis and interpretation of research results; Writing scientific papers and publishing results.		
Recommended literature - Alexander, E.R. (2005) Institutional Transformation and Planning: From Institutionalization Theory to Institutional Design. <i>Planning Theory</i> 4(3), 209-223. - Sanyal, B. (Ed.) (2005) <i>Comparative Planning Cultures</i> . Routledge. - Getimis, P. (2012) Comparing Spatial Planning Systems and Planning Cultures in Europe. The Need for a Multi-scalar Approach. <i>Planning Practice and Research</i> 27(1), 25-40. - Raimer, M., Blotvogel, H.H. (2012) Comparing Spatial Planning Practice in Europe: A Plea for Cultural Sensitization, <i>Planning Practice and Research</i> 27(1) 7-24. - Abram, S. (2016) Culture? And planning? <i>Planning Theory & Practice</i> 17(4), 654-657. - Bevir, M., Rhodes, R. A. W. and Weller, P. 2003. Comparative Governance: Prospects and lessons. <i>Public Administration</i> , 81(1), 191-210. - Commission of the European Communities – CEC. 1997. The EU compendium of spatial planning systems and policies, Luxembourg: Office for Official Publications of the European Communities. - DiGaetano, A. and Strom, E. 2003. Comparative urban governance: An integrated approach. <i>Urban Affairs Review</i> , 38(3): 356-395. - Healey, P. 2006. Transforming governance: Challenges of institutional adaptation and a new politics of space. <i>European Planning Studies</i> , 14(3), 299-320. - Hohn, U. and Neuer, B. 2006. New urban governance: Institutional change and consequences for urban development. <i>European Planning Studies</i> , 14(3), 291-298.		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures: independent research work, team work, mentor work		
Evaluation of knowledge (maximum number of points 100): Reports - 35 points Written work - 65 points		

Name of the subject: COLLABORATIVE URBAN PRACTICE FOR SUSTAINABLE DEVELOPMENT		
Teacher(s): Danijela M. Milovanović Rodić, PhD, Assistant professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The main objective of the course is to enable experts from different disciplines to design and actively participate in collaborative practices in order to articulate sustainable solutions appropriate to the specific territory and development context.		
Outcome of the subject Adopting the skills and knowledge needed for (a) research and critical analyses of existing professional practices in order to identify spaces for improvement; (b) communication and collaboration with experts of different profiles and integration of knowledge from different disciplines; (c) communication and collaboration with stakeholders with different needs, interests and resources, whereby many different, often conflicting perspectives implied; (d) establishing a minimum of common values in relation to which they can articulate and then implement socially and environmentally responsible and economically rational solutions. Improving understanding of (a) different theories and characteristics of practices within the communicative-collaborative paradigm; (b) key barriers to their realization with a focus on the different types of power that affect professional and public discourse; (c) ways in which collaborative practices can contribute to building professional, institutional and community capacity to formulate sustainable solutions and address future problems, but also counteract the realization of illegitimate interests by different mechanisms of power.		
Content of the subject Applied research/project that links the teaching process and the real development context. Results can obtain in different forms and types of professional products at different spatial levels. The aim is to examine existing and to contribute to the construction of new, better adapted and effective professional practice.		
Recommended literature		
<ul style="list-style-type: none"> - Buitelaar, E., Lagendijk, A., Jacobs, W. (2007). A theory of institutional change: Illustrated by Dutch city-provinces and Dutch land policy, <i>Environment and Planning A</i> 39(4) 891-908 - Allmendinger, P. & Tewdwr-Jones, M. eds. (2002). <i>Planning Futures: New Directions for Planning Theory</i>, Routledge - Healey, P. (2010). <i>Making Better Places. The Planning Project in the Twenty-First Century</i>. Red Globe Press. - Healey, P. (1997). <i>Collaborative Planning</i>, London, Macmillian - Innes, J., Booher, D.E. (2010). <i>Planning With Complexity: A Introduction to Collaborative Rationality for Public Policy</i>, Taylor & Francis - Margerum, D.R. (2002). Evaluating Collaborative planning: Implications from an Empirical Analysis of Growth Management, <i>APA Journal</i>, Spring 2002, Vol 68, No2 - Milovanović Rodić, D. (2015). Local Development Strategies Without Strategic Thinking: Lost in Between Politicians' Games, Administrations' Rigidity and Planner's Depression. <i>SAJ - Serbian Architectural Journal</i>. Vol.7. No.3, 2016, University of Belgrade, Faculty of Architecture, 3, 7, 1821-3952, pp. 381-400. - Миловановић Родић, Д. (2013). Редифинисање модела учешћа грађана у урбанистичком планирању Србије у складу са комуникативно-колаборативном парадигмом. Докторска дисертација. УБ АФ - Миловановић Родић, Д. (2007). Град договора. У Ђокић, В., Милић, В. (ур). <i>Престоница Београд</i>. Београд: Архитектонски факултет - Миловановић, Д. (2005). Унапређење учешћа грађана у урбанистичком планирању уз подршку информационих и комуникационих технологија. Магистарска теза. Архитектонски факултет. - Milovanovic Rodic D., Lalovic, K. & Zivkovic J. (2012). Architecture for the Other 90%: Social Activism, Economic Or Climate Crisis Respond. In: <i>Architecture and Ideology</i>. Belgrade: FA - Milovanović Rodic, D., Zivkovic, J. & Lalovic, K. (2013). Changing architectural education for sustainable future: A contribution to the discussion. <i>Spatium</i>, (29): 75-80 - Миловановић Родић, Д., Лаловић, К., Радосављевић, У. (2013). Proces formulisanja održivih resenja sa lokalnim inicijativama - Tekija i Krusevac, У <i>Klimatske promene i građena sredina</i>. Београд: ИАУС 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures: A combination of lectures, interactive forms of teaching and collaborative workshops		
Evaluation of knowledge (maximum number of points 100) Activity: 10; Quality of research during the semester: 30; Final work (60 points)		

Name of the subject: SUSTAINABILITY INNOVATION LABORATORY		
Teacher(s): Ksenija Ž. Lalović, PhD, Associate professor; Aleksandra B. Stupar, PhD, Full professor; Ratka P. Čolić, PhD, Assistant professor; Vesna P. Cagić Milošević, Full professor; Milena S. Kordić, PhD, Assistant professor; Ljiljana Đukanović, PhD, Assistant professor;		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The purpose of this course is to introduce students to an interdisciplinary co-creation process focused on innovation and strategic actions that contribute to the sustainability of human settlements. The objective of the course is to enable students to be proactive in a network of researchers, professionals, and interested organizations and individuals motivated to practice innovative action towards improving the quality of life in settlements. The course aims to empower students to participate, formulate, organize, and facilitate integrated multidisciplinary strategic projects and policies. Acting towards the sustainable development of a territory is a significant challenge for society as a whole, and strategic actions and innovative practices are the levers to initiate social transformation and create social capital for long-term development programs. The course aims to empower students to devise an integral perspective on observation and to create and co-produce an innovative pilot solution if there are conditions.		
Outcome of the subject By attending this course, students are expected to gain an understanding of the mechanisms behind designing, organizing, financing and conducting research procedures aimed at generating innovative sustainable practices and pilot products. Students should acquire the skills to formulate creative, strategic projects and policies for the observed context by taking an integrated perspective of observation, linking different instruments of territorial governance, and identifying key development actors from the public, civil and private sectors. Through independent and group research work, students acquire practical skills in conducting experimental quantitative and qualitative research methods, as well as the ability to promote, disseminate, and market innovative results in a social context.		
Content of the subject Practical classes include reviewing and exploring good international and domestic practices of integrated strategic innovation projects and policies, with particular emphasis on the European Research Area and linking the findings with identified problematic aspects of sustainability in the context of Serbia. Students will also be presented with the results of innovative experimental research at the Faculty of Architecture (innovations in the education and application of universal design for enhancing physical accessibility and urban inclusion - ZERO202 Global Award, Urban Revitalization of Mass Housing, International Students Competition, World Urban Forum 7, April 2014, UN-Habitat - 4 Global Awards, Integral Urban Projects for Flood Risk Management in the Obrenovac Example, Belgrade: University of Belgrade-Faculty of Architecture, Special Recognition at the 24th International Urban Development Show in Niš, etc.), in order to motivate students to act proactively and eventually build on the research they have started. Through their research work, students will have the opportunity to be involved in the process of formulating or implementing specific research projects funded by the Ministry of Science or other international organizations, thus gaining practical research experience in the implementation and dissemination of research results. As a result of the research work, innovations in the field of social organization, methodological improvements, ICT support, standardization, technological solutions, and the like are expected.		
Recommended literature <ul style="list-style-type: none"> - Battaglini, E. (2016). Learning Economies. Modelling Community-Led Local Development for the Sustainable Economic Trajectories of the Negotin and Zlatibor Regions. Directorate-General for Country Promotion (Economy, Culture, and Science). Rome: Ministry of Foreign Affairs and International Cooperation, Republic of Italy. - EC. (2001). A Sustainable Europe for a Better World: A European Union Strategy for Sustainable. Helsinki: European Commission. - EC. (2014). Guidance on Community-Led Local Development for Local Actors. European Structural and Investment Funds. - Gar-On, Y. A. (2008). GIS as a Planning Support System for the Planning of Harmonious Cities, UN-HABITAT lecture award series, no. 3. Nairobi, Kenya: UN-HABITAT. - Greene, R. (2001). Open Access – In E-Government. Redlands California: ESRI Press. - Scally, P. (2006). GIS for Environmental Management. Redlands, California: ESRI Press. - SIRP. (2005). SIRP - Program stanovanja i trajne integracije izbeglica i Srbiji. Retrieved Jun 2012, from UN-HABITAT Srbija: http://www.unhabitat.org.rs/srp/programmes/sirp/sirp.htm - UN-HABITAT. (2009). Planning Sustainable Cities: Global Report on Human Settlements. London Sterling, VA: UN. - Zanelli, K., & Feaster, L. (2003). Community Geography, GIS in Action. Redlands, California: ESRI Press. 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Interactive lectures and discussions, independent research work with mentoring guidance		
Evaluation of knowledge (maximum number of points 100) concept-20 points, research-30 points, study- 50 points		

Name of the subject: БРЕНДИРАЊЕ МЕСТА И РЕГЕНЕРАЦИЈА ГРАДОВА		
Наставници: Uroš V. Radosavljević, PhD, Associate professor; Budimir S. Sudimac, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The goal of the course is to gain knowledge and understanding of the need for place branding, recognized by contemporary city governments, researchers and experts in various fields as an instrument of urban strategies that can enhance the image, attractiveness and reputation of the city and create additional value in cities in an enduring global competition with other places.		
Outcome of the subject Students will acquire the ability to critically review existing knowledge, gain new knowledge and research skills of contemporary theoretical concepts and methods for place branding and urban regeneration, as well as the competence to apply this knowledge in their research within broader projects (depending on current projects and actual cooperation): a) EU Horizon Europe 2020 program; b) TIKА (Turkish Agency for Co-operation and Development) for small and medium-sized cities; c) research with or at US university; through targeted thematic research - conduction of seminar work resulting in work in SCI journal and chapter in monograph.		
Content of the subject Practical education is focused on independent multidisciplinary research and applied application. Students are endorsed to tailor their research to the research framework of the project, which is based on the assumption that the city governments and architects can contribute to the creation and strengthening of a unique identity, values and distinctiveness of particular places and social processes by using local resources to promote quality of life and achieve competitive advantage. In this context, the main research question within the project is how specific identities, narratives, traditions, place and architectural heritage can be capitalized into a successful strategy for place branding and urban regeneration by using various urban design and planning instruments for territorial, social and economically sustainable development and governance in the process of creating added value in the place. The aforementioned relations explore the possibilities of transposing values and identities into contemporary mainstream urban and architectural design and regeneration of cities.		
Recommended literature		
<ul style="list-style-type: none"> - Ashworth, G., & Kavaratzis, M. (2010) (Eds.) Towards effective place brand management: Branding European cities and regions. Cheltenham: Edward Elgar. - Ashworth, G. (2009) The Instruments of Place Branding: How is it Done? European Spatial Research & Policy, 16(1), 9-22. - Eshuis, J., & Edwards, A. (2013). Branding the city: The democratic legitimacy of a new mode of governance. Urban Studies, 50 (5), 1066-1082. - Kavaratzis, M., & Hatch, M. J. (2013). The dynamics of place brands: An identity-based approach to place branding theory. Marketing Theory, 13(1), 69–86. - Radosavljević, U., Đorđević, A., Živković, J., Lalović, K. & Đukanović, Z. (2019) Educational Projects for Linking Place Branding and Urban Planning in Serbia (2019) European Planning Studies, Forthcoming special issue - Tiesdell, S., Oc, T., & Heath, T. (1996). Revitalizing Historic Urban Quarters. New York: Architectural Press. - Van Assche, K., Beunen, R., & Lo, M. C. (2015). Place as layered and segmentary commodity: Place branding, smart growth and the creation of product and value. International Planning Studies, 21(2), 164-175. - Van Assche, K., Beunen, R., & Oliveira, E. (2019): Spatial planning and place branding: rethinking relations and synergies, European Planning Studies, Forthcoming special issue 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Interactive lectures, independent students' research work within the broader EU Horizon Europe 2020 program / TIKА (Turkish Cooperation and Coordination Agency) projects for small and medium-sized cities / research with or at US university / through targeted thematic research - seminar work.		
Evaluation of knowledge (maximum number of points 100) Presentation of the research during the semester: 30 points. Seminar work: 70 points.		

Name of the subject: ARCHITECTURE AND POLITICS		
Наставник: Aleksandar M. Ignjatović, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject Introduction to the research problem leading to the PhD thesis, acquisition of knowledge and critical analysis of the ideological content and political role of architecture in different historical and social contexts. The specific objective is to acquire knowledge about the political roles of architecture and visual culture at the time of the constitution of the modern European societies in the context of the ideology of nationalism and modern imperialism. These findings contribute significantly to the theoretical study of the historicization of the relationship between architecture, society and political discourse.		
Outcome of the subject By attending classes at the seminar, participants should acquire critical knowledge and intellectual competencies that will enable them to view architecture as an integral part of the ideological production of knowledge, construction of social identities, as well as of shaping and functioning of political discourse. By attending classes at the course, participants should acquire the capacity to independently analyze and draw conclusions about the relationship between architecture, the visual and policies, and to implement them in their own theoretical works.		
Content of the subject Diachronic and synchronic analysis of the relationship between political power, ideology and architecture from ancient Greece to modern times. Classes at the course include two intertwined perspectives. The first is based on the research of the roles of architecture as a discipline and as an agent of ideology and includes critical research and historicization of the problem of style, form and iconography. The second perspective involves the question of architecture as the content of ideology and political roles of architecture, primarily in the context of modern imperialism and nationalism. Diachronic and synchronic analysis of a number of selected examples: architecture as a discipline that includes specific instances of style, form, structure and typology; the position of architecture as an autonomous domain and architecture as an ideological practice; the question of architecture and political ideology; the question of architecture and political legitimation, and architecture and political propaganda.		
Recommended literature <ul style="list-style-type: none"> - Aleksandar Ignjatović, Jugoslovenstvo u arhitekturi 1904-1941, Beograd, 2007. - Lawrence J. Vale, Architecture, Power, and National Identity, London, 2008. - Anthony Smith, Nacionalni identitet, Beograd, 1998. - Barry Bergdoll, European Architecture 1750-1890, Oxford, 2000. - Robert Williams, Russia Imagined: Art, Culture, and National Identity, 1840-1995, London, 1999. - June Hargrove and NeilMcWilliam (eds.), Nationalism and French Visual Culture, 1870-1914, Washington and New Haven, 2005. 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Lectures and seminars		
Evaluation of knowledge (maximum number of points 100) Seminar paper = 70p Oral presentation = 30p		

Name of the subject: HERITAGE OF MODERNISM		
Наставник: Vladimir M. Lojanica, Full professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The goal of the subject is to instruct students in various possibilities of research and critical consideration of the role, significance and potential of modernist heritage (protection, promotion, revitalization, transformation, design, etc.). Also, through work on a research project, and presentation/publication of results in relevant scientific publications, conferences and exhibitions, the goal is to train students for independent scientific research and teamwork on specific applied research with an understanding of specific socio-political, cultural and economic context. In achieving these goals, special importance is given to: 1) involvement of students in current, as well as in the development and implementation of new research projects and other research formats in the field of modernist heritage, 2) cooperation with other institutions in the field of education and culture. , museums, archives, etc.).		
Outcome of the subject Through activities on the research project, students will be trained: for critical thinking and application of acquired theoretical and practical knowledge and skills in research work in order to: solve specific research issues; formulate new research questions and projects; generate new concepts and improve existing approaches; etc. Students will have the ability to understand the complex relationship and position of modernist heritage in the context of society, culture and history. Also, they will be trained for independent scientific-research work, as well as teamwork on complex research tasks and preparation of research projects in the field of modernist heritage.		
Content of the subject The course, through concrete applied research and practical work, deals with various topics and aspects of the heritage of modernism: <ul style="list-style-type: none"> - Actualization and re-examination of the significance and potential of modernist heritage in the modern moment - Identification and documentation, review of relevant scientific knowledge in this field - Promotion, presentation and cultural conservation of modernist heritage - Aspects of sustainability, protection and revitalization - Research of relations between projected, built and lived space (different spatial patterns and levels, program principles, behavioural phenomena, user groups, etc.) - Translating traditional values and principles of the heritage of modernism into new concepts and models - research through design - Understanding the relationship between society, history and culture in the development, preservation and transformation of the heritage of modernism - Establishing relations and encouraging the exchange of knowledge with other disciplines relevant to the legacy of modernism (art, technology, sociology, history, etc.) Research work on a specific task includes all phases of research (from defining the topic and subject of research, work on collecting and analyzing relevant primary sources and literature, formulating research questions, methodology, goals and expected results, to discussion and dissemination of results).		
Recommended literature In agreement with the teacher - in relation to a specific research task		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Independent and group research work, group discussions and presentations, workshops, research through the project, analysis of case studies, consultations with members of the research laboratory		
Evaluation of knowledge (maximum number of points 100) Pre-examination obligations: 40 points (pre-research - 20 points and project design - 20 points) Exam: 60 points (research project - 40 and oral defense -20)		

Name of the subject: PROJECT OF RESEARCH, VALORISATION, PROTECTION AND PRESENTATION OF CULTURAL HERITAGE		
Teacher(s): Mirjana Z. Roter Blagojević, PhD, Full professor; Marko S. Nikolić, PhD, Assistant professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The main objective is to enable students to relate acquired theoretical knowledge related to the methodology of research, evaluation and protection of natural and cultural heritage with the practical work of an independent research project through a case study. Through the process of formulation, conception and development of the project, they should master the process of research, evaluation, presentation and revitalization of cultural and architectural heritage.		
Outcome of the subject Independent research of a particular topic through a case study - within which students demonstrate the level of acquired knowledge and skills in the field of study, evaluation, protection, presentation and revitalization of cultural and architectural heritage. Through project work, students will gain the ability to test and compare different theoretical approaches and methodologies of research, evaluation and presentation of cultural heritage, aligned with the concept of sustainable development, preservation of historical character, authenticity and integrity of natural, intangible and architectural heritage. Developing critical thinking and independent decision-making, through the application of contemporary recommendations and concepts, in order to highlight the universal and distinctive characteristics of cultural heritage, as well as to enhance its protection and presentation, through contemporary functions.		
Content of the subject Mentoring work related to defining the topic and methodology of the research, consultations related to sources and literature, discussion of the research results and conclusions reached. Working on the collection and analysis of relevant sources and literature, field research, analysis and comparison of research results, defining different models and approaches to protection and presentation, etc. Work on the textual explanation of the research results and appendices, with verification of individual phases of work.		
Recommended literature References recommended by the mentor, as well as the literature suggested by the student and accepted by the mentor.		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Classes are realized through interactive forms of teaching, student research work and mentoring. An oral public defence of the thesis is envisaged.		
Evaluation of knowledge (maximum number of points 100) Written tests – 2x20 - 40 points Research project – 40 points Project presentation – 20 points		

Name of the subject: RECULTIVATION OF BUILT RURAL POTENTIALS		
Teacher(s): Aleksandar Č. Videnovič, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject In simpler terms, the objective of the proposed Small Research Project is to empirically test theoretical considerations, which would take place at the Election Seminar preceding it: "Revitalization of rural spaces and Architecture ". The aforementioned seminar is aimed at educating students in responding to the real problematic general state of rural areas. The small research project seeks to direct the response of science and the profession to specific artefacts in rural areas that have a functioning problem and represent paradigms of disadvantage and tendencies that need to be stopped and reversed. In a broader sense, the goal of a particular Minor Research Project is to synthesize the areas that make up architectural - urban planning: intellectual design and methodological realization. The main goal is student mastering of these processes on concrete models in rural settlements, on contrived contents of public character. It is about designing an approach to reclaiming abandoned, unused, and ambient and credit-worthy indoor and outdoor contents, their conversion, adaptation, rehabilitation and design, with the intention of realizing such a small project as a demonstrative example in the spirit of good practice and reputation, for further action in the reconstruction of rural settlements.		
Outcome of the subject Training of doctoral students for fully independent theoretical and empirical action through research into concrete models, critical observation of the essence of the problem and making their own rational useful decisions. Practising adequate functioning in prevailing rural settings with lost identities. Student understanding of the value of preserving the elements of the building tradition and the characteristics of quality elements of the customs and behaviour of people in primary social communities, about the need to find new, contemporary ways of using existing spaces. Creating usable, scientifically based and expertly verified projects for the individual revitalization of rural potential, bearing in mind the quality of the overall environment that individual interventions can reach.		
Content of the subject Exploration of the genesis, function, role in village structure, capacity, consequences of years of use, the conditionality of context, significance and role of specific public content (or grouping) in a particular rural settlement. These may be school facilities, cooperative homes (homes of culture), agricultural facilities, administration buildings, political or public services, retail outlets, and other public, even abandoned or unfinished multi-family housing facilities. In addition, historical, monumental or archaeological sites, objects of industrial archaeology, or artefacts in natural contexts and environments can be explored through the project in a meaningful way. Identifying and diagnosing problems, reasons for leaving or collapsing, negative impacts, and circumstances that led to deviance and identity loss. Student research through the theoretical part of teaching is conceived as a valuable stimulus and creative framework in creative, aesthetic and useful interventions, which are needed as a motive for the creation and alteration of the real situation, both for students and for local rural environments. Consideration of principles, aspects, opportunities and strategies of recultivation of concrete existing public architecture in rural areas, through the formation of concrete ideas and smaller architectural - urbanistic proposals - program solutions. Classes are planned through the development of preliminary design - small project studies, as concepts of reconstruction and eventual upgrading, and certainly conversion or restoration, with the necessary remodelling and modernization of an existing concrete building (or grouping) in a particular village or another rural area. Preliminary solutions - elaborations, are practical work for students before the dissertation and give local users an incentive and motivation to invest in creative, aesthetic and useful interventions, which are more than necessary for rural areas to preserve their existence and revitalize them.		
Recommended literature For the proposed Minor Research Project, much of the existing, not small, literature that addresses the theory of rural architecture and rurism is useful. Depending on the specific tasks, the focus will be narrowed to directing students to those titles, which may be useful in exploring specific topics theoretically and practically.		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Presentations, discussions, case studies, student research work, seminar paper, consultations, tutorial on small research project.		
Evaluation of knowledge (maximum number of points 100)		
Semester work: 40 points in total	10 points - impression and activity during the semester 10 points - problematization and research process 20 points - seminar work and program procedure – colloquium	
Exam: 60 points total	20 points - seminar paper 40 points - small research project	

Name of the subject: SOCIO-CULTURAL CONTEXT OF ARCHITECTURAL PRODUCTION: AESTHETIC READINGS		
Наставник: Vladimir F. Mako, PhD, Full professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject The main objective is the introduction to the research problem leading to the PhD thesis. In addition, the objective is for the students to master the knowledge in the field of contemporary aesthetic concepts, including the recognition of their importance in the study of socio-cultural conditionality of the latest trends in architecture. It is important to direct students to study specific areas in architecture that will introduce them to those spheres of action in architecture that will be the area of their final work on the PhD thesis.		
Outcome of the subject Students should demonstrate the ability to identify and read aesthetic values of architecture, and their socio-cultural determinism, as well. It is also essential to develop the ability to apply the acquired knowledge in the process of critical analysis of the values of modern concepts in architecture, and other important issues contributing to the wider scientific and creative approach to action in the field of architecture, as well.		
Content of the subject Theoretical education: the selection of relevant examples from the fields of architecture and demonstrative, aesthetic analysis of the context of their socio-cultural significance and development. The context of the comparative analysis of examples belonging to different cultural matrices is underlined, which indicates the importance of the transcultural aesthetic context of contemporary architectural practices. Practical education: where students choose topics, areas and examples on which to directly study the issues relevant to the acquisition of specific knowledge in the defined fields.		
Recommended literature <ul style="list-style-type: none"> - Jerry Palmer, Mo Dodson, Design and Aesthetics, Routledge, London 1996 - Charles Jencks, Karl Kropf, Theories and Manifestoes of Contemporary Architecture, Wiley-Academy, Chichester 2007 - Vladimir Mako, Estetika-Arhitektura, knj. 1 i 2, Orion Art I Arhitektonski fakultet Univerziteta u Beogradu, Beograd 2009 		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Instruction is a combination of ex-cathedra presentations and discussions with students while making sure that the topic is current and suitable for scientific research. Seminar paper (oral presentation)		
Evaluation of knowledge (maximum number of points 100) Attendance = 10p Preparations / study of literature and preliminary paper's content =30p Seminar paper = 60p		

Name of the subject: SPACE OF THOUGHT – ON ARCHITECTURAL SPACE		
Teacher(s): Dragana M. Vasiljević Tomić, PhD, Associate professor		
Status of the subject: Minor research project - Elective		
Number of ECTS points: 22		
Condition: Enrolled 4 th semester		
Goal of the subject Individual work within a complex research assignment, with a clearly defined critical overview of academic research, within the problematized field and its articulation through scientific architectural and artistic methodology is positioned as the main objective of work within doctoral studies.		
Outcome of the subject 1. Creative application of the visual arts and its importance and impact on architecture; 2. Creative application of comparable works during the design process within the studio, in terms of their conceptualization and representation. 3. Requirements and aspirations of the facilities' users; 4. Environmental impact of facilities and the principles of sustainable design; 5. How objects will fit into their contexts.		
Content of the subject The theoretical part of instruction provides the necessary scientific knowledge base within the set discourse. The lectures within the seminars refer to different disciplines and spheres, envisaged so that students understand the extent of possibilities for investigation in the design process, that is, comprehend the possibilities of research, providing and modifying (adapting) various scientific methodologies and approaches. Research through design starts from the basic, basic methodology of understanding the textual materials and materials of research discourse. Textual inquiry refers to the understanding of the text as a whole, for any given structure, with an emphasis on the recognition, application, or verification of theoretical postulates and design knowledge through the project, that is, contributing to the project and experiment adding to the creation and production of architectural design knowledge. The architectural design represents the practical part of teaching (working in a design studio), which enables students to master their architectural thematic skills, giving them the tools to translate values and attitudes defined through the base objectives of their ideas and design intentions into an architectural space, revealing ways that it can be realized.		
Recommended literature 2006: Ch. Landry, The Art of City Making, London:VA: Earthscan. 1996: H. Lefebvre, Writings on Cities, Oxford: Blackwell Publishers. 2002: M. Merleau-Ponty, Phenomenology of perception, London: Routledge. 2004: Y. Michaud, Umjetnost u Plinovitu Stanju [Art in a Gaseous State], Zagreb: Ljevak. 1995: I. de Solà-Morales Rubió, Terrain vague, Anyplace, Cambridge, 118-123. 1988:D.M. Samadah, A Symbolic Interactions Model of Lesure: Theory and Empirical Support, Leisure Sciences, 10 (1) 27-39. 1986: M. Foucault, Of the Other Spaces, Diacritics, 16/1, 22-27. 2004: M. Hansen, New philosophy for new media, Cambridge, Mass.: MIT Press. 2004: B. Tschumi, Architecture and Disjunction, Zagreb: AGM.		
Number of active classes: 14 (2+12)	Theory: 2	Practice: 12
Methods of delivering lectures Classes are conducted in the studio with added constant discussions and presentations of topics relevant to the project assignment.		
Evaluation of knowledge (maximum number of points 100) Ways of testing the knowledge may vary: (written tests, oral exams, project presentation, seminars)		

ELECTIVE COURSES
STUDY UNIT RESEARCH LABORATORY –
ELECTIVE SEMINAR

Name of the subject: CONTEMPORARY TREATMENT OF MATERIALS IN ARCHITECTURE		
Teacher(s): Ana P. Radivojević, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Consideration of various aspects and problems related to the application of materials in architecture, taking into account the variability and dynamics of the time we live in, the complexity of the requirements that construction materials need to satisfy, and the consequent complexity of the methodology of selection and evaluation of its application. The course aims to re-examine the role of materials in contemporary architectural and architectural creation in the following frameworks and relationships: innovation, technology, ecology, evolution, tradition, history.		
Outcome of the subject Understanding the complex role that materials play in contemporary construction practice in terms of different treatments and problems related to the application of materials in contemporary contexts, from innovation, implementation and potential of new materials, to completely different, contemporary approaches to the issues of application of compatible materials in the process of conservation of historical monuments. Acquiring the ability to implement acquired knowledge on specific research issues, as well as understanding the role and place of architecture among other scientific disciplines that address material problems.		
Content of the subject Nature of material and form. Indigenous material and context of construction. Reinterpretation and evolution of the application of traditional materials. New materials and construction options. Construction materials and environment. Modern requirements of construction and convenience of application of materials. Materials selection methodology. Methodology for assessing the environmental profile of materials. Student research work to deepen the knowledge gained through lectures through various forms of research, which, depending on the specific topic, student affinity and commitment to a narrower field of research, may include analysis of given literature and search for analogous and complementary examples in relevant scientific literature, research of archival material, field research, etc		
Recommended literature <ul style="list-style-type: none"> - Addington, Michelle and Daniel L. Schodek. Smart materials and new technologies: for the architecture and design professions. Oxford: Architectural Press, 2005. - Calkins, Meg: Materials for Sustainable Sites, Wiley, 2009. - Fernandez, John. Material Architecture. Emergent Materials for Innovative Buildings and Ecological Construction. Oxford: Elsevier, Architectural Press, 2006. - Hillebrandt, A., Riegler-Floors, P., Rosen, A., Seggewiesnette, J.: Manual of Recycling, Detail, 2019. - Leydecker, Sylvia. Nano materials in architecture, interior architecture and design. Basel, Boston, Berlin: Birkhäuser, 2008. Peters, Sascha. Material Revolution: Sustainable Multi-Purpose Materials for Design and Architecture. Basel, Boston, Berlin: Birkhauser, 2011. - Weston, Richard. Materials, Form and Architecture. New Haven: Yale University Press, 2003. - Petrović E., Vale B., Pedersen Zari M. (eds.) Materials for a Healthy, Ecological and Sustainable Built Environment. Principles for Evaluation. Duxford, Kidlington, Cambridge: Woodhead Publishing (Elsevier), 2017. 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Lectures, seminars and discussions with the active participation of students; consultations;		
Evaluation of knowledge (maximum number of points 100) activity during class + short papers on given teaching topics (30 points) + final seminar paper (70 points)		

Name of the subject: FUNCTIONAL AND REPRESENTATIONAL POTENTIAL OF WOOD IN CONTEMPORARY ARCHITECTURE		
Teacher(s): Jelena A. Ivanović Šekularac, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Complex understanding and expansion of knowledge about the possibilities, reasons and limitations of the use of wood and wood products in contemporary architectural practice and creating the basis for extensive and appropriate application. Development of new knowledge and principles of designing and executing primary wood construction as well as wood building envelope as an element of cladding using modern technical and technological solutions. Analysis of the relationship of wood and wood products as an element of interior and exterior cladding to other building materials applied in traditional and contemporary architecture with a focus on functional, design and visual possibilities of wood. The objective of the course is to achieve scientific skills and academic skills, to develop students' creative abilities and to acquire specific practical skills in the field of architectural structures, materials and building physics.		
Outcome of the subject The worldwide trend of re-use of wood and wood products as materials for building and cladding architectural objects is not solely based on the purpose of satisfying aesthetic, artistic and design requirements and seeking inspiration in returning to tradition and nature, but also on its ecological, economic and energy justification and integration into modern trends of sustainable development and application of modern technical and technological solutions in the production of materials. The outcome of the course is the acquisition of the student's ability to apply all the acquired knowledge to the specific problems that they deal with in doctoral studies, which are necessary in order to successfully work on the doctoral dissertation related to the materialization of the architectural object.		
Content of the subject The nature of the material and its application. The impact of traditional architecture on contemporary architectural works - Build in the spirit of regionalism. Aesthetic, visual, design and functional potentials of wood as primary construction and lining elements in contemporary architecture. Possibilities and limitations of wood application in contemporary architecture. Modern requirements for construction and application of wood and wood-based products in response to that. Wood and wood products as primary construction and lining element in combination with other materials. Practical classes are conducted through students' research work, alone or in a group, depending on the affinity of the students themselves. Through research work, the knowledge gained in lectures is tested and deepened, and the topic of research work is a narrower area of research for which the students are interested and which directly contributes to their research in further specialized teaching and the preparation of the doctoral dissertation. This research includes analysis of the literature, analysis of previous research in this area with the systematization of the gathered data, methods of field observation to gain knowledge about the issues that it deals with in the research and to reach conclusions.		
Recommended literature <ul style="list-style-type: none"> - Ивановић-Шекуларац Ј., 2017, Дрво у савременој архитектури, Универзитет у Београду - Архитектонски факултет, Београд - Herzog, Natterer, etc, 2004., Timber Construction Manual, Birkhäuser, Basel, - Hugues T., Steiger L., Weber J., 2004., DETAIL PRAXIS, TIMBER CONSTRUCTION, Birkhäuser, Basel, - Herzog, Kripner, Lang, 2004., Fassade Construction Manuel, Birkhäuser, Basel. - Natterer, Herzog, Volz, 1991., Holzbau Atlas, Rudolf Müller, Köln, 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures <i>Ex-cathedra</i> lectures, case analysis, interactive forms of teaching, active student participation in discussions, seminar papers, consultations.		
Evaluation of knowledge (maximum number of points 100) activity during classes and short papers/assignments on given teaching topics related to the topic of seminar work (30 points) + final seminar paper (70 points)		

Name of the subject: CONSTRUCTION AND RESTORATION		
Teacher(s): Nenad D. Šekularac, PhD, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Familiarization with the problems of restoration and preservation of structural elements of existing architectural objects as well as architectural heritage objects by applying appropriate technical methods and technological solutions. Consideration of different possibilities of structural solutions in order to find the optimal structural solution in the reconstruction of existing buildings. Solving practical and theoretical problems in the field of architectural engineering. Acquisition of new knowledge in the field of structural statics on concrete examples of architectural objects. Acquiring and improving knowledge of the application of modern principles of constructive solutions in the rehabilitation and reconstruction of architectural objects. In this way, the student is trained to independently conduct original and scientifically relevant research in the field of architectural engineering and construction technology.		
Outcome of the subject Encouraging students to analyze and think critically in the field of construction technology as well as architectural engineering while developing their creative skills and mastering specific practical engineering skills.		
Content of the subject Constructive features of existing architectural and heritage buildings. Analysis of damage, deformation (cracks and fractures) on architectural objects and causes of their occurrence. Analysis of existing architectural objects and architectural heritage objects. Problems and methods of ensuring temporary security and protection of architectural objects and objects that are subject to intervention and protection. Methods of soil stabilization and foundation remediation. Technical methods and technological solutions for the consolidation of wooden, masonry, concrete and steel structures. Strengthening methods. Possibilities of constructive interventions on existing architectural objects and architectural heritage objects in the country and abroad. Practical classes are conducted through the students' research work, alone or in a group, depending on the affinity of the student himself. Through research work, the knowledge gained in lectures in the field of architectural engineering and construction technology is tested and deepened. Referral to the research process and various forms of research, depending on the specific topic, represents a narrower area of research for which the student is interested, and the topic of the research paper is a specific area of research for which the student is interested and which directly contributes to his research in further specialized teaching. This research includes: analysis of the literature, analysis of previous research in this area with the systematization of the obtained data, methods of field observation, in order to gain knowledge about the problems that the student deals with in researching a specific problem, etc. посматрања на терену, а се у циљу стицања знања о проблематици којом се студент бави у истраживању конкретног проблема и сл.		
Recommended literature <ul style="list-style-type: none"> - Theodossopoulos, Dimitris. Structural Design in Building Conservation. New York: Routledge, 2012. - Donald Friedma, Historical Building Construction: Design, Materials, and Technology. W. W. Norton, 2010 - Carbonara Giovanni, 2009, Atlante del Restauro architettonico, Utet Scienze Tecniche, B. Zevi, Manuale del restauro architettonico, 2008, Mancosu Editore, - Stefania Franceschi, Leonardo Germani, Manuale operativo per il restauro architettonico, 2010, DEI - Милорад Димитријевић, Статичко конструктивни проблеми у заштити градитељског наслеђа, Универзитета у Београду Архитектонски факултет, Београд, 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures <i>Ex-cathedra</i> lectures, case analysis, interactive forms of teaching, active student participation in discussions, seminar papers, consultations.		
Evaluation of knowledge (maximum number of points 100) class activity and short papers on assigned teaching topics related to the topic of seminar paper (30 points) + final seminar paper (50 points) + presentation of the paper (20 points)		

Name of the subject: FROM GREY TO GREEN		
Teacher(s): Dušan M. Ignjatović, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject		
<p>The main goal of the course is innovative understanding the building stock as one of the fundamental contemporary resources - one of the very few that is constantly growing. The existing building stock presents a specific challenge for the future development of the profession and the knowledge for its adequate treatment represents a new skill of the profession. Changes in the design paradigm, lifestyle, functional-technological-energy requirements pose new challenges for objects that lead to often inadequate, adaptation or complete abandonment due to the inability to fulfil new, multi-layered requests, therefore, it is necessary to analyze and understand the process of necessary transformation analytically and critically.</p> <p>The objective of the course is to develop a methodological approach for adequate analysis of the current state, understanding and basic knowledge of contemporary diagnostic techniques and methods, valorization of limitations and, in particular, the potentials that the building fund carries with it.</p> <p>The acquired knowledge aims to form a solid basis for understanding the possibilities of qualitative remodelling of building stock. Consideration of life-cycle principles, the link between technology and transformability, the importance of embedded energy and its conservation is also one of the goals of the course.</p>		
Outcome of the subject		
<p>The outcome of the course is mastering the methodological apparatus of analysis, structuration and valorization of the building stock according to current technological and energy requirements.</p> <p>The outcome of the project is to understand and incorporate modern methods of investigation of the performance of buildings in the process of analyzing the current state, from simulations to performance measurement.</p> <p>Understanding of potentials, technological possibilities, design challenges and valorization of developed solutions is also one of the outcomes of the subject.</p>		
Content of the subject		
<p>Building stock: structure, classification, performance, influencing factors, the dynamic pace of changes: design, technological, energy. Possibilities and principles of performance determination by simulation and various diagnostic methods. Technological limitations and potentials in the process of transformation. Life cycle and embedded energy issues according to the applied technology system. Activation and transformation modalities - transformation levels: valorization of achieved solutions.</p> <p>Analysis of the construction fund segment, typology principle. Principles of performance testing: calculation (simulation), in situ measurements, regulations, standards, limitations, application. Analysis of the structure, organization and material composition of the building. Valorization of the existing state, identification of deficiencies, possibilities for improvement Transformation diversity: ranges, modalities, performance. Existing as a foundation for the new - <i>From gray to green</i></p>		
Recommended literature		
<ul style="list-style-type: none"> - Giebeler G., Krause H., Fisch R., Musso F. 2005.: Refurbishment Manual, Birkhauser, - Douglas J. 2006.: Building adaptation, Butterworth-Heinemann, - Richarz, C. Schulz C. 2013: Energy efficiency refurbishments, Detail - Gauzin-Müller, D. 2003: Sustainable Architecture and Urbanism: Concepts, Technologies, Examples, Birkhauser 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures		
Ex-cathedra lectures, presentations, case studies, seminars		
Evaluation of knowledge (maximum number of points 100)		
Student presentations (30) Seminar paper – research study (70)		

Name of the subject: TECHNOLOGY AND NATURE IN THE SERVICE OF ARCHITECTURE		
Teacher(s): Budimir S. Sudimac, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The objective of the course is to critically review and explore the adaptability and impact of new technologies on architectural objects based on the dynamic balance between nature and technology. Research should find an adequate architectural model capable of interacting with nature and users through self-regulation of their systems and needs. Through research, students spatially and programmatically redefine various aspects, opening up a new field of research into the relationship between nature and architecture, treating that relationship as a potential place to create and realize the architecture of the future. The impact of technology in addressing the relationship between nature and architecture is methodologically investigated, its assessments and contextual relationship strategies are given. This approach involves a compromised understanding of the links between resource scarcity, energy demand, renewable energy, new materials and technologies. An important issue in addressing sustainable systems and establishing urban and architectural models is finding new relationships between nature and architecture, developing regenerative technology and life cycles, and developing systems and strategies for future development by applying performative architecture and network architecture. Research in the fields of architecture, sociology, urbanism, philosophy and the arts should ensure the super-integration of basic human needs for work, energy and food, viewing them as a meta-systemic transition to completely new possibilities for architecture, society and technology.		
Outcome of the subject The outcome of the course is the development of the philosophical aspect of architecture and the creation of opportunities to focus on a synergistic approach to exploring the nature and architecture of the future while developing a holistic strategy. Architecture is no longer the expression of one individual, but the expression of the collective, the expression of the platform and the network of influence. Through a discursive forum of exploring new approaches to solving technological singularity, as a hypothetical point in the future, the technological development of civilization is gaining momentum in ever-shorter intervals. The outcome of the research is to find adequate architectural models capable of interacting with nature and users through self-regulation of their systems and needs. Through exploring the relationship between public and private space and the role of individuals and collectives in creating dynamic and hybrid communities, students spatially and programmatically redefine architectural typology through the implementation of new technological solutions modelled on nature. The outcome of the course is to create the conditions for a comprehensive understanding of natural resources and sustainability in the built environment. Such thinking should respond to futuristic architectural concepts, their philosophy and more efficient biomimicry. Understanding the relationship between nature and architecture is the result of a new perspective on planning and construction, transferring interdisciplinary knowledge and competencies. This approach involves a compromised understanding of the links between resource scarcity, energy efficiency, renewable energy, new materials and technologies. The research approach should ensure the super-integration of basic human needs for labour and energy, viewing them as a meta-systemic transition to completely new possibilities for architecture, society and technology. The key question is how to translate the relationship between nature and architecture into basic philosophical aspects of architecture and how to focus it on a synergistic approach to exploring the architecture of the future. We are living in an era of technological advances that enable the mastery of the forces of nature and the undoing of time and space. Research needs to respond in a discursive forum, through a new approach in addressing technological singularity as a hypothetical point of the future.		
Content of the subject Facade sheaths, composition, design, energy potential in architectural and urban design. Exploring new approaches to solving technological singularity. The influence of technology in addressing the relationship between nature and architecture. Functional, technological and design aspects of facade design and construction. Problems defining the object wrapper.		
Recommended literature - PETRA GRUBER, BIOMIMETICS IN ARCHITECTURE ARCHITECTURE OF LIFE AND BUILDINGS, Institute for History of Architecture and Arts, Building Research and Preservation Vienna Institute of Technology Vienna, Austria, 2011 Springer-Verlag/Wien, Printed in Germany, Behling, Braun, BIONIK SKINS, Institut für Baukonstruktion, Universität Stuttgart, 2003 - Sue Roaf, David Crichton and Fergus Nicol, ADAPTING BUILDINGS ANDvCITIES FOR CLIMATE CHANGE, A 21st-century survival guide, 2005Hollwich Matthias, SYMBIONIC, UNIVERSITY OF PENNSYLVANIA – PennDesign Department of Architecture - Design Studio 701, Fall 2006 - Helmut Pottman, Andreas Asperl, Michael Hofer, Axel Kilian, ARCHITECTURAL GEOMETRY, Bentley Institute Press, Exton, Pennsylvania, USA - Marianne Stokholm, BIONIKS, Students' guide for mini project on 4th term 2006, Architecture & Design, Aalborg University, January 2006 - Bill Gething, DESIGN FOR CLIMATE CHANGE, Riba publishing, ISBN 978 1 85946 448 9 - Behling Sophia and Behling Stefan, SOLAR POWER the evolution of sustainable architecture, New York, Prestel, 2000 - Herzog Thomas (ed.), SOLAR ENERGY IN ARCHITECTURE AND URBAN PLANING, London, Prestel, 1996. - Kemp William H. SMART POWER: AN URBAN GUIDE TO RENEWABLE ENERGY AND EFFICIENCY, Tamworth, Aztext Press, 2004. Yannis Simos, Errel Evyator, Molina Jose Luis, ROOF COOLING TECHNIQUES, London, Earthscan, 2008.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Mentoring, lectures, presentations, exam		
Evaluation of knowledge (maximum number of points 100) Seminars (oral exam)		

Name of the subject: EVALUATION OF THE ENVIRONMENTAL PERFORMANCE OF BUILDINGS		
Teacher(s): Nataša D. Ćuković Ignjatović, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject During the seminar, the student is introduced to the methodology, structure and tools used in the process of evaluating the ecological properties of buildings in order to enable independent and critical evaluation of the buildings or their components and design features that are the subject of his research. In addition, the course aims to enable the student to structure and present the results obtained in this field in a clear and concise form.		
Outcome of the subject The course outcome is the student's verified ability to critically address and objectively evaluate the diverse and sometimes contradictory environmental properties of buildings. The result of the research is shaped into a scientific paper that goes through the reviewed publishing procedure (paper accepted in a scientific journal, paper presented at an international conference, etc.), with continuous cooperation with the course professor.		
Content of the subject <i>Theoretical lectures (preferably to be realized prior to the work on a minor research project or during its earliest stage)</i> Introduction to contemporary paradigms of green, sustainable and resilient architecture; the interactions of technological, cultural and socio-economic factors in the perception and valorization of the environmental characteristics of buildings. <i>Cradle-to-Cradle</i> concept and design principles in the field of architecture and design. Principles, design premises and tools of the EU <i>Level (s)</i> platform. Green Building Certification Systems - principles, structure, tools, models, examples (LEED, BREEAM, DGNB, WELL, HQE ...) <i>Practical lectures (if needed, it can be implemented at the same time as working on a small research project)</i> Evaluation work on buildings and architectural features relevant to candidate research: - discussion, positioning in relation to current theories; - defining goals and categories relevant to the research; - defining criteria, parameters and indicators as the basis for the evaluation; - evaluation of ecological properties of selected objects; - verification of results; - summarizing and presentation of the results.		
Recommended literature - Green Building Certification Systems, T. Ebert et al, Detail Green Books, 2011. - Cradle to Cradle. Remaking the Way We Make Things, M. Braungart, W. McDonough, North Point Press 2002. - A Green Vitruvius, V. Brophy and J.O. Lewis, Earthscan 2011. - Sustainable and Resilient Building Design - Approaches, Methods and Tools, S. Kosanović, T. Klein, T. Konstantinou, A. Radivojević and L. Hildebrand (Eds.), TU Delft Open 2018. - Reviews of Sustainability and Resilience of the Built Environment for Education, Research and Design, S. Kosanović, A. Fikfak, N. Novaković and T. Klein (Eds.), TU Delft Open 2018. - Conserving energy/Сачувај енергију, Д. Игњатовић, Н. Ђуковић Игњатовић, ГИЗ и Универзитет у Београду – Архитектонски факултет, 2017. - Design for Ecological Democracy, R.T. Hester, MIT Press 2006. - A Life Cycle Approach to Buildings, H. Koning et al., Detail Green Books, 2010.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures <i>Ex-cathedra</i> lectures, interactive forms of teaching, case studies, smaller research projects, presentations, writing a short scientific paper.		
Evaluation of knowledge (maximum number of points 100) work during the semester (presentation of defined goals, parameters, criteria and indicators) 50 final thesis (presentation of the obtained results in the form of a short scientific paper) 50		

Name of the subject: COMFORT IN RESIDENTIAL BUILDINGS		
Teacher(s): Ljiljana S. Djukanović, PhD, Assistant professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The objective of the course is to study, systematize and evaluate the housing stock according to contemporary requirements of housing comfort. Modern society is recognizing that the need for energy savings is a prerequisite for responsible behaviour towards future generations, which, given the dominant consumption in the realm of housing, places the focus on the housing stock fund. Given current world trends in improving the quality of housing stock, the study of its characteristics, structure, materialization, is a prerequisite for a thorough examination of the condition of the housing stock, its qualities, but also disadvantages. Stricter requirements in the area of housing comfort impose a constant need to review existing residential buildings and define their future development.		
Outcome of the subject Understanding of an interdisciplinary approach in considering the fulfilment of different conditions of residential comfort. Training students in defining criteria and parameters for assessing living conditions and mastering software tools for evaluating them. In addition, theoretical instruction provides students with a multifaceted knowledge of the historical development, structure and materialization of the housing stock of Serbia, which may be the starting point for their further research.		
Content of the subject Part of the theoretical teaching is directed to the study of the housing stock from the point of view of its building structure with the aim of studying those elements of the building structure that are relevant for valorization from the point of view of comfort. The second part of theoretical instruction is directed at defining the parameters and criteria for assessing residential comfort. Thematic units covered by the theoretical instruction: Housing systematization; Typology of characteristic circuits; Defining analytical models; Housing comfort parameters and defining criteria for housing valuation. Practical lectures are focused on the interests of students in order to explore models that may be useful in the preparation of a doctoral dissertation. Students can explore different aspects of residential comfort individually or in groups using software tools to check performance.		
Recommended literature <ul style="list-style-type: none"> - Radivojević A., Đukanović Lj. (2018) Material aspect of energy performance and thermal comfort in buildings. Ćuković Ignjatović N., Konstantinou Th., Zbašnik-Senegačnik M. (eds.). <i>Book 4 Energy: Resources and Building Performance. KLABS book series: Reviews of Sustainability and Resilience of the Built Environment for Education, Research and Design</i>. Delft: TU Delft Open of the Technische Universiteit Delft, pp. 57-81. - Јовановић Поповић, М., и др. (2012). <i>Атлас породичних кућа Србије/Atlas of Family housing in Serbia</i>. Београд: Архитектонски факултет и GIZ (двојезично издање). - Јовановић Поповић, М., и др. (2013). <i>Национална типологија стамбених зграда Србије/National Typology of Residential Buildings in Serbia</i>. Београд: Архитектонски факултет и GIZ. - Јовановић Поповић, М., и др. (2013). <i>Атлас вишепородичних зграда Србије/Atlas of Family housing in Serbia</i>. Београд: Архитектонски факултет и GIZ. - Јовановић-Поповић, М. (1991). <i>Zdravo stanovanje</i>. Biblioteka arhitektonika (sveska 7). Београд: Архитектонски факултет - Јовановић-Поповић, М. и др.(2003). <i>Енергетска оптимизација зграда у контексту одрживе архитектуре: Фаза 1: Анализа структуре грађевинског фонда</i>. Београд: Архитектонски факултет. - Јовановић-Поповић, М. и др. (2005). <i>Енергетска оптимизација зграда у контексту одрживе архитектуре: Фаза 2: Могућности унапређења енергетских карактеристика грађевинског фонда</i>. Београд: Архитектонски факултет. 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures: ex-cathedra lectures, seminars and discussions with active student participation; presentations; development of seminar paper.		
Evaluation of knowledge (maximum number of points 100) Activity during classes and seminars on given topics: 30 points; Seminar paper: 70 points		

Name of the subject: DESIGN OF THE PROPERTIES AND APPLICATION OF THE HIGH-PERFORMANCE CONCRETE IN ARCHITECTURE		
Teacher(s): Dejan T. Vasović, PhD, Assistant professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Introduction to the contemporary developments in the development of High-Performance Concretes (HPC) and Ultra-High-Performance Concrete (UHPC). Reaching to the modern level of scientific knowledge and skills in the field of design and application of special types of concrete. Understanding, interpretation and critical review of the scientific advances in the field of special types of concrete. Training for independent scientific and research work, as well as for creative development of application of materials in the field of architecture.		
Outcome of the subject Thorough knowledge and understanding of contemporary research and scientific developments in the field of special concrete, with a focus on HPC and UHPC. Capability to follow the further development of special types of concrete and participate in it independently. Capability to research and work independently in the field of material development and application of special types of concrete.		
Content of the subject Presentation of contemporary approach in mathematical and experimental modelling of design and application of special types of concrete in elements and assemblies of architectural objects. Development of a methodological approach for modelling and production of special types of concrete and their application. Verification of theoretical settings through practical work on the development and modelling of a special type of concrete, as well as its application in architectural objects.		
Recommended literature Books: Nevil, A.M., Properties of Concrete, Aitcin, P.C., High-Performance Concrete Journals: ACI Structural Journal, ACI Material Journal.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures: Ex-cathedra lectures, case study analysis, student discussions, mathematical testing and modelling of materials and applications in architectural objects, experimental work (where opportunities exist), consultations.		
Evaluation of knowledge (maximum number of points 100) Seminar work (0 – 40 points); Project/model presentation (0 – 60 points)		

Name of the subject: METHODOLOGY OF DESIGNING ECONOMIC STRUCTURES		
Teacher(s): Radojko M. Obradović, PhD, Assistant professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Acquiring the necessary knowledge and developing methodologies based on dominant characteristics in the analysis of structures with variations will ensure optimization of a given structure according to set criteria.		
Outcome of the subject Ability to perform scientific research independently and the ability to choose the optimal structural system and then select the parameters that lead to the optimal construction.		
Content of the subject <i>Theoretical education</i> Analysis of traditional and contemporary structural systems. Development of a methodological approach based on the most important parameters singled out for individual systems in order to enable further optimization by deeper analysis. <i>Practical education</i> Case study analysis on built objects in order to test the acquired theoretical knowledge.		
Recommended literature <i>Books:</i> <ul style="list-style-type: none"> • Daniel L. Schodek, Martin Bechthold, <i>Structures</i>, Pearson, 7th edition, 2013. • Bjørn N. Sandaker, Arne P. Eggen, Mark R. Cruvellier, <i>The Structural Basis of Architecture</i>, Routledge, 2nd edition, 2011. • Frederick S. Merritt, Jonathan T. Ricketts, <i>Building Design and Construction Handbook</i>, McGraw-Hill Professional, 6th edition, 2000. <i>Journals:</i> <ul style="list-style-type: none"> • Engineering Structures • Structures • Journal of Building Engineering IASJ Journal		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures: Lectures; Case Study; Open Discussions; Computer Simulations; Consultations		
Evaluation of knowledge (maximum number of points 100) Research paper (0 – 100 поена)		

Name of the subject: PUBLIC ART, THE PUBLIC SPHERE AND THE PRODUCTION OF SPACE		
Teacher(s): Zoran N. Djukanović, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Introducing students to the types, forms and conditions of realization of architectural - urban - artistic projects in the public sphere, ie in public spaces, which are accomplished by the interdisciplinary action of artists, architects, planners and designers, as well as various forms of participation of the public and the local community in the process of planning, designing and realization.		
Outcome of the subject Enabling students to understand interdisciplinary activities in the field of planning, design and implementation of projects to improve the spatial aspect of the public sphere / public urban spaces by activating and (re) designing them through the use of different artistic forms and means. A critical understanding of the specific possibilities and limitations of urban design in which art, architecture and urbanism help to improve the quality of urban life.		
Content of the subject <i>Theoretical education</i> 1) Public art versus art in public space; Spatially specific, contextually specific and community-oriented art; Public sphere, democratic sphere, cultural citizenship; Placemaking: Public artwork as a public space. 2) Public art in public space: the context of action: Public art in Serbia; Public art in public spaces; Citizen participation in the process of artistic design of public urban spaces; Social, economic and political context as a basis for action. 3) Strategic concept of institutionalization of "public art": Strategies and principles for locating and activating "public art"; Valorization of resources concerning the preferences of the target groups; Human Resources; Institutional framework; Public art, culture, tourism and cultural tourism; Marketing and Branding. 4) Case studies. <i>Practical education</i> Research of public domain characteristics in the sphere of public spaces as well as possibilities of their improvement through realization of various artistic, architectural and urban programs. Possibilities are explored in which the fields of architecture and urbanism find their adequate role in the improvement of public urban spaces, their activation and (re)design by the application of different artistic methods and forms of expression. For the focal subject area: a) the general and specific characteristics of the broader thematic field and problem subcontinent are defined; b) comparative studies of adequate case studies in domestic and foreign practice; v) identify and analyze existing and identify new development strategies and programs for improvement projects; g) explore the possibilities and effects of the implementation of specific original projects.		
Recommended literature - Bishop, C. (2012) Artificial Hells: Participatory Art and the Politics of Spectatorship, London - New York, Verso - Burio, N. (2001) Relaciona estetika, Beograd, Centar za savremenu umetnost - Cartiere, C. and Willis, S. (2008) The Practice of Public Art, New York, Routledge - Debord, G. (1994), The Society of the Spectacle, New York: Zone Books, - Ђукановић З. (2016) Употреба партиципативне јавне уметности у урбаном дизајну (докторска дисертација) Архитектонски факултет Универзитета у Београду; Београд - Ђукановић З., Бобић А., Живковић Ј., и други; (2011) Уметност у јавном простору: експертска студија просторне провере ужег градског језгра Ужица за потребе уметничке продукције у јавном простору; Academica – академска група; Београд - Ђукановић З., Живковић Ј., (2008) Public art and Placemaking / Јавна уметност и креирање места: студија случаја Београд-градска општина Стари град, Архитектонски факултет Универзитета у Београду; Београд - Fleming, R. (2007) The Art of Placemaking: Interpreting community through public art and urban design. London, Merrell. - Gehl, J. and Svarre B. (2013) How to study public life, Washington D.C.: Island Press - Lefebvre, H. (1974) La production de l'espace, Paris: Anthropos. izdanje na engleskom 1991 The Production of Space, Donald Nicholson-Smith trans., Oxford: Basil Blackwell - Lefebvre, H. (1968) Le Droit à la ville, Paris: Anthropos (2nd ed.); Paris: Ed. du Seuil, Collection "Points" енглеско издање "The Right to the City" у (1996) Writings on Cities, E. Kofman and E. Lebas, trans. and eds., Oxford: Basil Blackwell. - Мако, V. (2009) Estetika – Arhitektura, knjiga 2: kreativni proces između subjektivnog i opšte- društvenog estetskog značenja, Beograd, Arhitektonski fakultet Univerziteta u Beogradu i Orion Art, 2009. - Benjamin, W. (1970) "The Work of Art in the Age of Mechanical Reproduction", in Illuminations, ed. Hannah Arendt, trans. Harry Zohn, London: Cape - Felshin, N. (ed.) (1995) But is it Art? The Spirit of Art as Activism, Seattle: Bay Press, Inc. - Habermas, J. (1962) Strukturwandel der Öffentlichkeit. Darmstadt: Luchterhand. издање на енглеском (1989) The Structural Transformation of the Public Sphere: An Inquiry into a category of Bourgeois Society, Polity, Cambridge - Jacobs, J. (1961) The Death and Life of Great American Cities. New York, Random House.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures mentoring, lectures, presentations, exam		
Evaluation of knowledge (maximum number of points 100) / Activity and work during the semester: 30 points in total Seminar paper (theoretical part of the exam): 30 points in total Final exam (practical part of the exam): 30 points in total Teacher impression: 10 points		

Name of the subject: URBAN PATTERNS		
Teacher(s): Aleksandra M. Djukić, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Critical consideration, understanding of the genesis, transformation and development of urban patterns. Acquiring knowledge about the cultural, natural and created conditionality of urban form, the interrelationships between the user and the physical and natural environment in the urban environment. Training for independent research, critical analysis of the literature and case studies.		
Outcome of the subject Ability to develop analytical and critical thinking and understanding and application of knowledge in practice; ability to recognize and evaluate ideas and cognition; the ability to identify and appropriately use sources of relevant information and identify and utilize the tools found; the ability to prepare, process, interpret, and present data, using appropriate qualitative and quantitative techniques.		
Content of the subject <i>Theoretical education</i> Morphogenesis and transformation of urban patterns; Culture and urban patterns; Climate change and urban patterns; Identity, humanity, visual perception; Sociocultural context and psychological conditioning of urban pattern formation. <i>Practical education</i> Research of morphogenesis and transformation of urban patterns in a specific area (case study), typology of urban patterns; Establishing criteria for an evaluation in relation to socio-cultural, natural and created conditions; Development of codes to propose the future transformation of urban patterns against the selected criteria.		
Recommended literature <ul style="list-style-type: none"> - Abel C. (2000). Architecture and Identity: responses to cultural and technological change, Architectural Press, Oxford. - Alexander, C., Ishikawa S., Silverstain M.(1977). A Pattern Language, Oxford University Press, New York. - Bentley I., Alcock A., Murrain P., McGlynn S., Smith G. (1985). Responsive Environments – A Manuel for Designers, Butterworth Architecture, Oxford. - Cliff Mougftin (2001). Urban Design – street and square, Architectural Press, Oxford. - Dovey K. (1999). Framing Places: mediating power in built form, Routledge, London, New York. - Gehl, J Gehl, J. (2008). Life Between Buildings: using public space, Danish Architectural Press, Kopenhagen - Gehl, J. (2010). Cities for People, Island Press, Washington - De Certau (1984). The Practice of Everyday Life, University of California Press, Berkeley.. - Harvey S., Fieldhouse K., Hopkins J. (2005). The Cultured Landscape: designing the environment in the 21st century, Routledge, London, New York. - Kostof, S. (1992). The City Assembled – The Elements of Urban Form Through History, A. Bulfinch Press - Book; Little Brown and Company, Boston. - Криер Р. (1999). Градски простор у теорији и пракси, Грађевинска књига, Београд. - Lynch K. (1984). Good City Form, The MIT Press, Cambridge., London. - Zukin S. (2000). The Cultures of Cities, Bleckwell Publishers, Oxford. 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Classes are conducted through interactive and multimedia lectures (ex-cathedra, conversation, surveys), independent research work of students during the semester (use of recommended literature), elaboration of acquired knowledge and their presentation (work during the semester and semester work after the semester ends).		
Evaluation of knowledge (maximum number of points 100) Pre-exam obligations 40 Exam (seminar – written essay) 60		

Name of the subject: URBAN GOVERNANCE AND URBAN MANAGEMENT		
Teacher(s): Uroš B. Radosavljević, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The main goal of the course is to expand existing and to introduce new theoretical, methodological and practical knowledge related to theoretical concepts of urban governance and management regarding contemporary urban development. Additionally, the course aims to provide students with an understanding of basic methods in the scientific research of urban governance, contemporary instruments and principles of urban management positioned within the framework of market understanding and operations, besides traditionally solely the role of the public sector in contemporary collaborative and just urban development outcomes.		
Outcome of the subject Ability to critically explore concepts and theories of urban governance and management, adequately apply contemporary concepts and instruments in a realistic context, skills in debating and conducting dialogues to engage and fairly represent the interests of actors.		
Content of the subject <i>Theoretical education</i> provides a critical rethinking of traditional public sector governance and focuses on the transformation towards contemporary modes of entrepreneurial urban governance and management as collective and interdependent actions of representatives of the public, private and civil sectors to balance the interests of urban actors in the processes of the production space. The rethinking is inspired by postmodern cultural criticism and philosophical changes from logical positivism to the fundamental concern for ethics and public policies, within which the debate in urban governance and management shifts from methods and programs to aspects of the discourse of dialogue, fairness and inclusion. In this context, two paradigms are considered: a collaborative-communicative paradigm, with a focus on the governance process and the different interests of actors in an open dialogue to reach consensus on goals; and, a just city paradigm focused on the governance outcomes representing interests for the community well-being and public mobilization in the contemporary city. Urban management is complexly considered as a model for the operationalization and organization of the state-market relations (public and private sectors) and for transformative actions in urban governance. Furthermore, regulatory, incentive and information instruments of urban governance and management from a global context are presented. An overview of the models is given in which the instruments combined to influence the achievement of different socio-economic goals, effects and outcomes, such as sustainability, economic development, attracting private sector investment, equity and social justice as a right to the city in contemporary urban governance. <i>Practical education</i> is conducted through independent students' thematic research and can be a theoretical exploration of (distinct) management concepts; research of a selected contemporary urban management instrument from a European and Serbian context, the use and effects of the instrument in a real setting, and the main preconditions and risks for its implementation; or in accordance with the students' expressed interest and in line with the subject's teacher.		
Recommended literature <ul style="list-style-type: none"> - Amirtahmasebi, R. et al (2016). <i>Regenerating Urban Land: A Practitioner's Guide to Leveraging Private Investment</i>. Urban Development Series. Washington, DC: World Bank. - Fainstein, S. (2010) <i>The Just City</i>, New York: Cornell University Press - Friedmann, J. (2011) <i>Insurgencies: Essays in Planning Theory</i>, New York: Routledge. - Harvey, D. (1989) 'From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism', <i>Geografiska Annaler. Series B, Human Geography</i>, The Roots of Geographical Change: 1973 to the Present, vol. 71, no. 1, pp. 3-17. - Harvey, D. (2009) <i>Social Justice and the City</i>, revised edition, Athens, GA: The University of Georgia Press - Healey, P. (1997) <i>Collaborative Planning: Shaping Places in Fragmented Societies</i>, London: Macmillan. - Pierre (2011) <i>The Politics of Urban Governance</i>, London: Palgrave Macmillan. - Vedung, E. (1998) 'Policy Instruments: Typologies & Theories', in Bemelmans-Videc, M.-L., et al. (ed.) <i>Carrots, Sticks, & Sermons: Policy Instruments & Their Evaluation</i>, Piscataway, London: Transaction Publishers, pp. 21-58. - Радосављевић, У. (2014) <i>Формирање модела урбаног менаџмента у реализацији стратешких пројеката</i>, докторска дисертација, Београд: Архитектонски факултет - Stoker, G. (1998) <i>Governance as Theory: Five Propositions</i>, <i>International Social Science Journal</i>, vol. 50, no. 155, pp. 17-28. 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Mentoring and interactive lectures, independent students' research work on the analysis of theoretical texts and case studies, debates and thematic research - production of seminar work.		
Evaluation of knowledge (maximum number of points 100) Presentation of the research during the semester: 30 points. Seminar work: 70 points.		

Name of the subject: INSTRUMENTS FOR GENERATING KNOWLEDGE IN SUSTAINABLE DEVELOPMENT		
Teacher(s): Ksenija Ž. Lalović, PhD, Associate professor; Ratka P. Čolić, PhD, Assistant professor; Jelena A. Živković, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The main objective of this course is to introduce students to the core of contemporary theoretical and disciplinary discourse on the nature and essence of cognitive processes and the generation of knowledge necessary to achieve sustainability. Acting towards the sustainable development of a territory is a significant challenge for society as a whole. The effectiveness and efficiency of the actions taken depend directly on the decision-making method and the information base available to make them. The objective of this course is for students to develop a more sophisticated understanding of the relationship between decision making in the processes of design, planning, and spatial development management and the available objective and subjective knowledge based on which they are made. This course aims to impart knowledge of an integral and transformative process of generating the knowledge necessary to overcome complex problems and reach sustainability norms in diverse social contexts. It aims to develop the capacity for interdisciplinary opening and innovation in creating information and knowledge support for sustainable urban and territorial development.		
Outcome of the subject By attending this course, students are expected to improve their understanding of the complexity, dynamism, and unstructured nature of sustainability issues whose effective and efficient solution involves locally and globally sensitive choices. Students should gain knowledge of the current post-postmodern position of critical realism towards spatial development and become familiar with the methods, techniques, and tools of disciplinary action in the overlapping of social sciences and humanities. The outcome of taking this position allows students to understand the need to re-examine the theoretical and conceptual setting of knowledge and information support for spatial and territorial development in the observed context. Through independent research, students acquire the skills to recognize the information needs of local, sustainable development in the context of global development processes. They are skilled in applying an integral framework for structuring knowledge in sustainable development, as well as selecting quantitative and qualitative techniques and tools for data collection, integration, and systematic visualization based on contemporary information- communication technologies.		
Content of the subject <i>Theoretical education</i> include consideration of the post-positivist philosophical position, as a critique of both ontological and epistemological positivist (traditional) scientific positions in spatial planning and management. It involves exploring contemporary critical discourse that enhances the acceptance of the local culture and value component of spatial development but in synergy with global norms of balanced development. A particular part of theoretical instruction is devoted to the phenomenon of knowledge in the design, planning, and management of sustainable spatial and territorial development. Then, the processes of capturing the complexity of reality required by global norms and sustainability paradigms by relying on integral theory and integral methodological framework are discussed. Finally, students are presented with information and cognitive strategies for knowledge development, implementation of up-to-date ICT, and GIS-based tools for the development of intelligent city intelligence, as well as a conceptual model of territorial information systems to support sustainable development. <i>Practical education</i> involve focused research into the nature of the cognitive process necessary to effectively and productively solve an identified real-world problem through professional action at the level of design, planning, or spatial transformation management. Students choose a problem area and, through independent research work and critical, logical relation to contemporary theoretical and paradigmatic discourse, develop the concept of knowledge generation and information strategies necessary for solving it.		
Recommended literature Castells, M. (2000). <i>The Rise of the Network Society, The Information Age: Economy, Society, and Culture</i> . Blackwell Publishers. Hamilton, M. (2008). <i>Integral City, Evolutionary Intelligences for the Huma Hive</i> . Canada: New Society Publishers. Brail, R., & Klosterman, R. (2001). <i>Planning Support Systems</i> . ESRI Press. Brown, B., & Riedy, C. (2006). <i>Use of the Integral Framework to Design Developmentally-Appropriate Sustainability Communications</i> , in W. L. Filho (ed.), <i>Innovation, Education, and Communication for Sustainable Development</i> . Frankfurt: Peter Lang Scientific Publishers. Checkland, P. B., & Poulter, J. (2006). <i>Learning for Action: A short definitive account of Soft Systems Methodology and its use for Practitioners, Teachers, and Students</i> . Chichester: Wiley. Ines, J. E. (1990). <i>Knowledge and Public Policy: The Search for Meaningful Indicators</i> . New Brunswick: Transaction Publishers. Laurini, R. (2001). <i>Information Systems for Urban Planning</i> . London: Taylor and Francis. O'Looney, J. (2003). <i>Beyond maps, GIS, and Decision Making in Local Government</i> . Redlands, California: ESRI Press.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Interactive lectures and discussions, independent research work with mentoring guidance		
Evaluation of knowledge (maximum number of points 100) concept-20 points, research-30 points, study- 50 points		

Name of the subject: ECOLOGICAL URBANISM		
Наставници: ; Jelena A. Živković, PhD, Associate professor; Ksenija Ž. Lalović, PhD, Associate professor; Zoran N. Djukanović, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The purpose of the course is to encourage students to reflect on the relationship between city and nature through a critical analysis of the different meanings, bases and approaches to ecological urbanism, in pursuit of more sustainable urban development.		
Outcome of the subject Key outcomes of the course are: gaining knowledge of the various philosophical foundations, concepts and theories of ecological urbanism; better understanding of the city as a socio-ecological system; developing critical thinking as well as developing research, communication and presentation skills.		
Content of the subject <i>Theoretical education</i> The numerous environmental challenges we face today (climate change, soil, water and air pollution, depletion of resources, etc.) are the result of existing, unsustainable patterns of development. Therefore, the ways in which people shape their environment are examined, and different approaches are developed that seek to bring together urban nature and human activities in a new way. This seminar aims to provide insight and critically examine the various contemporary theories of "ecological", "green", "sustainable", "biophilic", "landscape", "integral" ... urbanism as a framework to guide the construction and regulation of human settlements. At the same time, addressing environmental challenges requires a new understanding of <i>the city as a socio-ecological system</i> . In this sense, the purpose of the seminar is to open and discuss the issue of the complex relationship between ecology and urbanism, starting from the fact that how we understand the term "ecology" and "ecological" affects how we relate it to urban space, urban planning and design. As a result, in addition to ecology as a science that provides the basis for understanding and evaluating the relationship between man and the environment, the concepts of "ecological thinking", "ecological worldview", and "ecological literacy" are considered as important for shaping research, evaluation and action in urban space. The course covers the following topics: Development of an ecological approach in the theory and practice of urban development; Characteristics of the contemporary ecological approach: from "ecology in the city" to "ecology of the city"; Philosophical foundations of ecological urbanism; Eco-design theories and eco-city concepts; Ecological urbanism and sustainable development; Ecological qualities of urban space in the context of pluralism of interests, use and meaning of urban space; Ecological planning and design in light of climate change; Challenges and dilemmas of ecological urbanism. <i>Practical education</i> Practical course teaching involves the regular preparation and participation of students in class discussions, as well as writing a final paper.		
Recommended literature <ul style="list-style-type: none"> - Mostafavi, M., & Doherty, G. (Eds.) (2010) Ecological Urbanism., Baden: Lars Müller Publishers - Whiston Spirn, A (1984) The Granite Garden: Urban Nature and Human Design, Basic Books - Žarden Dž.R. (2006) Ekološka etika: uvod u ekološku filozofiju, Beograd: Službeni glasnik - Guattari F 2000 (1989) The Three Ecologies, London: Athlone - Braungart M., Mc Donough W. (2009) Cradle to cradle: remaking the way we make things, London: Vintage books - Hough M. (1995) Cities and Natural Processes, London, Routledge - Turner.T (1996) City as Landscape, London: E&FN SPON, p.128 - Elin, N (2006) Integral Urbanism, NY: Routledge - Waldheim Ch. (ed.) (2006) The Landscape Urbanism Reader, NY: Princeton Architectural Press - Orr D.W.(2002) The Nature of Design: ecology, culture, and human intention.NY: Oxford University Press - Van Der Ryn S., Cowan S., (1996) Ecological Design, Island Press, Washington DC - Thompson G. & Steiner F. (eds) (1997) Ecological Design and Planning, NY: Wiley & Sons, INC - Beatley, T.(2010) Biophilic Cities: Integrating Nature into Urban Design and Planning, Washington: Island Press. - Jacobs J. (1961) The Death and Life of Great American Cities. New York: Vintage. 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures The seminar is organized through interactive lectures and discussions and individual research work of the student.		
Evaluation of knowledge (maximum number of points 100) Weekly assignments – 50; Exam: Final paper 50		

Name of the subject: MEASURING THE IMMEASURABLE – THE PRINCIPLES OF CITY DEVELOPMENT ASSESSMENT		
Teacher(s): Vladimir P. Mihajlov, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject		
<ul style="list-style-type: none"> • Research of creative city development management • Successful implementation of evaluation in planning proposals and architectural solutions • Examining the effective assessment of possible alternatives to urban development • Review of newer methods of evaluation of city development alternatives, efficient decision-making for site and activity optimization in plans and (mega) projects • Research of urban evaluation activities, plans and projects through the prism of social theory • Identification of material and intangible interests of individuals and interest groups 		
Outcome of the subject		
<ul style="list-style-type: none"> • Mastering the techniques of evaluating plans and design practice • Methodology assessment for measuring the effects of urban plans and design in Serbia, solving the problem of redistribution of urban resources is present • Training education for critical review of different evaluation concepts in relation to contemporary urban planning and design theory and practice 		
Content of the subject		
<i>Theoretical education</i>		
<ol style="list-style-type: none"> 1. Introduction: Evaluating of urban development alternatives in contemporary society 2. How to illuminate the problem of evaluating urban development alternatives? 3. Four concepts of urban plan evaluation 4. Public Choice Theory- a new platform in the evaluation of urban development 5. Transformations in society: changes in the practice of evaluating plans and design projects 6. Evaluation of plans in different socio-economic frameworks – limitations in practice 7. Tools: technical and methodological basis for the evaluation of urban development alternatives 8. Quantification of effects in urban development - conversion of urban phenomena into measurable values 9. Evaluation of urban development alternatives - limitations in practice 10. Examining the concepts: fronesis (practical wisdom) and the power of social groups in the evaluation of urban plans 11. The issues of democracy and transparency in the evaluation of urb. design and plans 12. Fronezis in evaluating alternatives of city development: limitations and possibilities of the concept 		
<i>Practical education</i>		
Critical analysis of methods and techniques in the praxis of evaluation and decision-making on the city development:		
<ul style="list-style-type: none"> • Analysis of examples of urban alternative development plans in Serbia and the world: case studies <ul style="list-style-type: none"> - • Proposals for evaluation and verification hypothesis in the PhD research draft 		
Recommended literature		
<ul style="list-style-type: none"> - Buchanan, J "Cost and Choice: An Inquiry in Economic Theory", 1969. - Flyvbjerg, B. (2001) Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again. Cambridge University Press. - Flyvbjerg, B., Bruzelius N., Rothengatter W. (2003) Megaprojects and Risk: An Anatomy of Ambition. Cambridge University Press. - Harvey, D. (2009): Social Justice and the City (Revised Edition). University of New York, CUNY Press - Lichfield, N., Whitebread, M. & Kettle, P. (1975). Evaluation in the Planning Process, Oxford: Pergamon Press Ltd. - Mann, D. Lawrence (1964): Studies in Community Decision – Making, Journal of the American Institute of Planners, Vol 30, , str 58 – 65 - Михајлов, В. (2016) <i>Мерење немерљивог – Иновативне методе процене алтернатива развоја града</i>. Београд: Архитектонски факултет. ISBN 978-86-7924-149-8 - Noinville, G. (1971). Evaluating Community Preferences, Environment and Planning, U Transport Road Research Laboratory, str. 33–50 - Patton, C. & Sawicki D.S. (1986). Basic Methods of Policy Analysis and Planning. N.Y.: Prentice-Hall, Englewood Cliffs - Sager, T. (2009) Planners' Role: Torn between Dialogical Ideals and Neo-liberal Realities European Planning Studies, Volume 17, Issue 1 , pages 65 – 84 - Stiglitz, Joseph E. (2004) Економија јавног сектора. Београд: Економски факултет - Wyatt, R.(1989) Intelligent Planning. London: Unwin Hyman 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures :		
Mentoring, action research, lectures, presentations, seminars.		
Evaluation of knowledge (maximum number of points 100) Presence and activity in teaching course: 10 points		
Quality of research during the semester: 30 points		
Seminar work (exam): 60 points		

Name of the subject: CITY AND CITIZENS: DESIGNING PARTICIPATORY AND COLLABORATIVE PRACTICES		
Teacher(s): Danijela M. Milovanović Rodić, PhD, Assistant professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Acquiring knowledge of philosophical foundation, theoretical background and modalities of professional practice within the communicative-collaborative paradigm.		
Исход предмета Mastering the knowledge and skills necessary to design participatory and collaborative practices appropriate to the specific territory, community, institutional system and development context.		
Content of the subject <i>Theoretical education:</i> The concepts of <i>city</i> and <i>citizen</i> are linked to the concepts of state, rule of law, public sphere, democracy, institutions, public and private interest, individual and collective autonomy and citizens' initiatives, that is, interpreted in relation to the concepts of civil society and sustainable development. An overview of different theories and their roles in the construction of meaning within the communicative-collaborative paradigm (positivism, post-positivism and reflexive modernism, structural theory, communicative rationality theory, communicative action theory, communication theory, deliberative democracy theory, institutional theory, communicative planning theory). The concepts relevant for the design of different types of participatory and collaborative practices are specifically interpreted and discussed: conflict, power, interests, knowledge-value relationships, institutions and institutional arrangements, criteria for evaluating the results achieved and the quality of collaborative processes. <i>Practical education:</i> A critical analysis of specific urban practices from positions/criteria adopted within the theoretical part of the course.		
Recommended literature		
<ul style="list-style-type: none"> - Buitelaar, E., Lagendijk, A., Jacobs, W. (2007). A theory of institutional change: Illustrated by Dutch city-provinces and Dutch land policy, <i>Environment and Planning A</i> 39(4) 891-908 - Dimitrijević, V.; Paunović, M. (1997). <i>Ljudska prava</i>, Beogradski centar za ljudska prava, Beograd - Flyvbjerg, B.; Richardson, T. (2002). Planning and Foucault: In Search of the Dark Side of Planning Theory, In Allmendinger, P. & Tewdwr-Jones, M. eds., <i>Planning Futures: New Directions for Planning Theory</i>, London and New York: Routledge, pp 44-62. - Forester, J. (1987). Planning in the Face of Conflict, u Le Gates, R.T, Stout, F. (eds.) (2003, First edition published in 1996): <i>The City Reader</i>. Routledge, London and New York - Friedmann, J. (2000). The Good City: In Defense of Utopian Thinking, <i>International Journal of Urban & Regional Research</i>, Jun2000, Vol. 24 Issue 2, p460, 13p; - Habermas, J. (1984). <i>The Theory of Communicative Action</i>. Boston, MA: Beacon Press. - Healey, P. (2010). <i>Making Better Places. The Planning Project in the Twenty-First Century</i>. Red Globe Press. - Healey, P. (1997). <i>Collaborative Planning</i>, London, Macmillan - Innes, J., Booher, D.E. (2010). <i>Planning With Complexity: A Introduction to Collaborative Rationality for Public Policy</i>, Taylor & Francis - Margerum, D.R. (2002). Evaluating Collaborative planning: Implications from an Empirical Analysis of Growth Management, <i>APA Journal</i>, Spring 2002, Vol 68, No2 - Milovanović Rodić, D. (2015). Local Development Strategies Without Strategic Thinking: Lost In Between Politicians' Games, Administrations' Rigidity And Planner's Depression. <i>SAJ - Serbian Architectural Journal</i>. Vol.7. No.3, 2016, University of Belgrade, Faculty of Architecture, 3, 7, 1821-3952, pp. 381-400. - Миловановић Родић, Д. (2013). <i>Рedefинисање модела учешћа грађана у урбанистичком планирању Србије у складу са комуникативно-колаборативном парадигмом</i>. Докторска дисертација. Универзитет у Београду Архитектонски факултет. - Миловановић Родић, Д. (2007). Град договора. У Ђокић, В., Милић, В. (ур). <i>Престоница Београд</i>. Београд: Архитектонски факултет - Миловановић, Д. (2005). <i>Унапређење учешћа грађана у урбанистичком планирању уз подршку информационих и комуникационих технологија</i>. Магистарска теза. Архитектонски факултет. - Petovar, K. (2003). <i>Urbana sociologija: naši gradovi između države i građanina</i>, AF, GF Univerziteta u Beogradu, IAUS, Beograd 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures: A combination of lectures and interactive forms of teaching (case study analysis, presentation and discussion of research results).		
Evaluation of knowledge (maximum number of points 100)		
Activity: 10; Quality of research during the semester: 30; Seminar paper (60 points)		

Name of the subject: INTEGRAL TERRITORIAL DEVELOPMENT		
Teacher(s): Ratka P. Čolić, PhD, Assistant professor; Ksenija Ž. Lalović, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The goal of the course is to provide students with an understanding, mastery of methods and knowledge in the field of urban policies. This includes strengthening critical awareness, understanding of current research and contemporary urban policies; developing a systematic and detailed understanding of territorial and urban governance practices.		
Outcome of the subject Adequate knowledge of urban policies and urban and territorial government. Students will gain knowledge of contemporary urban policies; critical awareness, awareness of current research and contemporary practice of urban policies; systematic and detailed knowledge of territorial and urban governance practices and instruments in place.		
Content of the subject <i>Theoretical education</i> - Urban governance advocates collective actions that achieve the public interest. It is based on the principles of communicative/collaborative planning and pluralistic democracy and involves a range of actors and institutions interconnected by a flexible system and developing capacities to respond to socio-economic challenges, globalization, fragmentation of institutions and communities, emerging technologies and communication. Governance practices use the available combination of governance instruments to modify government capacity and increase the efficiency and legitimacy of decisions. Urban policies include measures to promote sustainable and integrated urban development and urban renewal. Policies imply measures, plans, programs, projects, budgets and procedures - that is, all concepts and activities used to solve problems. In addition to traditional urban planning instruments, the role of policies is becoming increasingly important in the context of territorial governance and urban development. <i>Practical education</i> - The assignment is based on work, where students explore sustainable and integrated urban policies, thematically and problem-oriented - housing, urban poverty, integration of refugees and migrants, sustainable land use, climate change adaptation, urban mobility, air quality, digital transition, etc.). Students consider the contemporary issues of urban development of the local context and the impact of EU and other urban policies on a specific example.		
Recommended literature Borraz, O., Le Galès, P. (2010). Urban governance in Europe: the government of what? <i>Pôle Sud</i> , Vol. 1, No.32. pp. 137-151. Fukuyama, F. (2013). What Is Governance? <i>Governance: An International Journal of Policy, Administration, and Institutions</i> , Vol. 26, No. 3, pp. 347–368. Hyden, G. (2011). Making the state responsive: rethinking governance theory and practice. In G. Hyden, & J. Samuel (Eds.). <i>Making the state responsive: Experience with democratic governance assessments</i> . (pp. 5-28). New York: UNDP. Jessop, B. (2016). Territory, Politics, Governance, and Multispatial Metagovernance, <i>Territory, Politics, Governance</i> , Vol. 4, No.1, pp. 8-32. Innes J., and Booher, D. (2003). Collaborative policymaking: governance through dialogue, in M.Hajer & H.Wagenaar (Eds.) <i>Deliberative Policy Analysis: Understanding Governance in the Network Society</i> , London: Cambridge University Press. pp.33-59. Trkulja, S., Colic, R., Maksin, M., (2018). <i>Sustainable and Integrated Urban Development Strategy of the Republic of Serbia until 2030</i> , Ministry of Construction, Traffic and Infrastructure, Belgrade, supported by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), Strengthening Municipal Land Management in Serbia, Belgrade. Belgrade, December, 2018. Novi Sad: Artprint Media, 212 pp. ISBN 978-86-9000093-2-9 CIP 711.4(497.11) COBISS.SR-ID 270942988		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures : Interactive lectures and discussions, independent research work with mentoring guidance		
Evaluation of knowledge (maximum number of points 100) concept-20 points, research-30 points, study- 50 points		

Name of the subject: HYBRID ARCHITECTURAL CONCEPTS		
Teacher(s): Vladimir M. Lojanica, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The objective of the course is to introduce the phenomenon of "Hybrid architectural concepts" to students. Presentation, interpretation and understanding of the concept, methods, and logical structure of this methodologically specific concept and design process, as well as improving the acquired theoretical knowledge and upgrading practical, design experiences.		
Outcome of the subject The expected outcome of the course relates to getting the skills of synthetic, multi-layered, abstract thinking about architectural concepts that lead to their implementation in the architectural projects through increasingly complex multidisciplinary relationships today.		
Content of the subject The subject Hybrid Architectural Concepts contains two equal parts. The theoretical part gives an overview of the complex relations between theory and practice and the interdependence of the complex factors of the contemporary creative process in architectural design. Focusing on the research of concepts and phenomena, with topics such as contextual influences and design, research by design, integrated design, multidisciplinary, post-economy, experiment, algorithm, diagram, network, co-existence, co-evolution, synthetic space, cybernetics, nanotechnology, perception, etc. The second part, related to practical learning, involves mentoring the demonstrative interpretation, research, and analysis of individual, concrete illustrative cases with an individual focus on translating and using knowledge on personal creative examples related to the specific affinities of the candidate. In combination with any other teaching fields organized according to typological and other categorizations, the basis for the further project, process or phenomenological research, elaboration or thematic projects may be the basis.		
Recommended literature Recommended literature is determined subsequently in relation to the specificity of individual researches of each student and is determined.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures The teaching methods include mainly <i>ex-cathedra</i> lectures, but also mentoring, lectures, presentations, and exams		
Evaluation of knowledge (maximum number of points 100) Activity during semester / 20 points Final paper (theoretical part of the exam) / 30 points Presentation (practical part of the exam) / 30 points Teachers' opinion / 20 points		

Name of the subject: ARCHITECTURE AND VISUAL LANGUAGE		
Teacher(s): Branko D. Pavić, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Enabling students for creative work on the final art project through critical analysis and creative use of contemporary experiences and practices in the field of art and architecture.		
Outcome of the subject The student's ability to create artistic work and the possibility of its analysis and explanation.		
Content of the subject <i>Theoretical education</i> Review and interpretation of own work and analysis of contemporary concepts in the field of architecture and art in order to prepare for the final project. <i>Practical education</i> The practice takes place through constant mentoring in all phases of the creation and production of the final individual work of art.		
Recommended literature <ul style="list-style-type: none"> - Likovne sveske 1-9, Beograd, Univerzitet umetnosti Urbani spektakl, Dragičević-Šešić, Klio i Justat, 2000. - Teatar-politika-grad, Dinulović, Brkić, Justat, beograd, 2007. - Audio-vizuelna istraživanja 1994-2004, Pavić, Jelenković, Mladenović, Arhitektonski fakultet, beograd, 2008. - The Politics of Architecture and Subjectivity, Antoine Picon, John Wiley and Sons, 2013. - Umetnost, arhitektura, dizajn R 301, Jelenković, Pavić, Miljković, Arhitektonski fakultet, beograd, 2014. 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Mentoring, lectures, presentations, exam.		
Evaluation of knowledge (maximum number of points 100) Work during the semester: a total of 30 points Seminar paper (theoretical part of the exam): a total of 30 points Lecture (practical part of the exam :) a total of 30 points. Teacher impression: a total of 30 points		

Name of the subject: MODIFICATION OF AUTHENTICITY / AUTHENTICITY OF MODIFICATION		
Teacher(s): Borislav Petrović, Full professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The focus is on the disparity of value systems of members of the architectural profession and those for whom their products are intended, as well as future trends that should lead to overcoming this situation, characteristic of architecture in this and other areas. The goal is, therefore, to analyze and carefully measure the interrelationship of the analyzed constituents, implying the existence of the message, as well as the different ways of its communication.		
Outcome of the subject Relativization of principled-a priori (design) attitudes, ie their constant re-examination and harmonization with authentic forms of behavior and understanding of commonplace. Understanding that pre-defined authenticity can be modified, in a way and to the extent that the users of the future organized space give the impression that they are not forced to make radical changes.		
Content of the subject <i>Theoretical education</i> Interpretation of architecture as a type of creation that relies on commonplace, trying to "uncommon" them, like any art. Analysis of the conceptual basis of architecture, from the communication (therefore, fundamental) aspect, separating the elements of the expected - the usual and the elements of the unexpected - the unusual, while determining the relationship between these two components - conventional and unconventional. Observing this relation on a perceptual, syntactic, semantic and symbolic level, defining boundary cases in which too many conventional rhetorical components lead an architectural work towards banality, and otherwise, the strong presence of unconventional elements carries a high degree of risk that the (architectural) work will not be understood. and acceptance by those for whom it is intended. <i>Practical education</i> A series of design sequences, mutually coordinated and harmonized, at the same time directed towards the formation of a previously defined meaningful whole.		
Recommended literature <ul style="list-style-type: none"> - 2017 B. Petrović, I. Rašković, (urednici i autori), sa D. Stojanović, P. Stamenović, D. Dukanac (autori) - "BUDUĆNOST STANOVANJA; aspekti odživosti budućeg stanovanja u Srbiji", monografija, izdavač: Arhitektonski fakultet Univerziteta u Beogradu, Beograd; ISBN 978-86-7924-173-3; COBISS.SR-ID234452748 - 2011 B.Petrović, I.Rašković - "TRADICIJA - TRANZICIJA; upotreba nasleđa u arhitekturi", monografija, izdavači: Arhitektonski fakultet Univerziteta u Beogradu, IAUS i Orion art, Beograd; ISBN 978-86-83305-43-8; COBISS.SR-ID185333004 - 2011 B.Petrović - "O APOKALIPTIČNOM TONU - usvojenom nedavno u srpskoj arhitektonskoj kritici", monografija "Srpski arhitekti / Serbian architects 2000- 2010", urednica Ana Kovenc-Vujić, izdavači: Inženjerska komora Srbije i Društvo arhitekata Beograda, Beograd, str. 22-29.ISBN 978-86-903247-7-4; COBISS.SR- ID185190924 		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Presentation and defence of seminar paper		
Evaluation of knowledge (maximum number of points 100) Activity: 10; Quality of research during the semester: 30; Seminar paper (60 points)		

Name of the subject: RESEARCH METHODS IN THE DOCTORAL ART PROJECT		
Наставник: Др ум. Милорад Ј. Младеновић, редовни професор		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The aim of the elective course Research Methods in a Doctoral Art Project is to acquaint doctoral students with the characteristic methodologies that are applied in doctoral art studies in various fields of art. Within the theoretical and practical classes, various methods will be explained and researched, by which various artistic poetics are formed into complete-textual forms, striving for the realization of a unique and complete doctoral art project. The aim of this research is to enable doctoral students to clearly understand the way in which the reciprocity of artistic realization and text is implemented, and thus a quality understanding of the thought process that is conducted within artistic poetics. Also, the goal is to understand doctoral art projects and artists' practices, as complementary processes, through research and to use these understandings for the proper development of scientific research that candidates are engaged in, especially in those domains in which the object of their research artistic poetics of the author of importance for scientific work.		
Outcome of the subject The outcome of the elective course Research Methods in Doctoral Art Projects is an understanding of the relationship between authorial realizations in art and their textual practices that accompany them within the whole doctoral art projects in various fields of art, and that understanding that can be applied to scientific research in architecture. The outcome of teaching is knowledge and understanding of specific methodologies of the doctoral art research. Working on case studies of the realization of doctoral art projects enables doctoral students of architecture to correctly interpret the thought and conceptual intentions of the author of art, which they can deal with in their doctoral work. The outcome of the subject is a case study of an author from a chosen artistic field which shows knowledge and possible use of knowledge in a future doctoral thesis.		
Content of the subject <i>Theoretical education</i> Theory is based on: presentation of the meaning and content of artistic doctoral projects, analysis of differences in the methods of artistic and scientific doctoral studies and theses, presentation and analysis of various artistic doctoral projects from various fields of art and analysis of the applicability of the methods of doctoral artistic research in the realization of scientific research in the field of architecture. <i>Practical education</i> Practice is based on: research and analysis of a specific case study of a doctoral art project, designing textual papers related to the case study, analysis of the purposefulness of thematic research in the formation of a possible doctoral thesis and production and defense of textual work of importance for scientific research in the field of architecture.		
Recommended literature The 'Florence Principles' on the Doctorate in the Arts, Amsterdam: European League of the Institutes of the Arts (ELIA), 2016, https://www.elia-artschools.org/userfiles/File/customfiles/1-the-florence-principles20161124105336_20161202112511.pdf M. Wilson, S. Van Ruiten (Eds.), SHARE / Handbook for Artistic Research Education, Amsterdam: European League of the Institutes of the Arts (ELIA), 2013, https://www.elia-artschools.org/userfiles/Image/customimages/products/120/share-handbook-for-artistic-research-education-high-definition.pdf S. Scrivener, Reflection in and on practice in creative-doctoral projects in art and design. Working papers in art and design, Coventry University, 2000., https://www.herts.ac.uk/_data/assets/pdf_file/0014/12281/WPIAAD_vol1_scrivener.pdf E. W. Borg, The experience of writing a practice-based thesis in Fine Art and Design, University of Leeds, 2009, http://theses.whiterose.ac.uk/3745/1/uk_bl_ethos_522924.pdf Дигитални репозиторијум докторских дисертација и докторских уметничких пројеката, Универзитет уметности у Београду, http://eteze.arts.bg.ac.rs/ , или на пример види: R. Antonijević, Korektivi oblika / Vodič kroz skulptorske fenomene, Beograd: ProArtOrg, 2014. B. Đurđević, Hipnerotomahija Polifili ili Žudnja za ljubavlju u snovima, Beograd: ProArtOrg, 2014.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Lectures and presentations of research with defense, with consultations.		
Evaluation of knowledge (maximum number of points 100)		
Work during the semester: a total of 30 points Seminar paper (theoretical part of the exam): a total of 30 points Lecture (practical part of the exam :) a total of 30 points. Teacher impression: a total of 30 points		

Name of the subject: THEORETICAL APPROACH AND CONCEPTS OF RESEARCH, VALORISATION AND PROTECTION OF CULTURAL HERITAGE		
Teacher(s): Mirjana Z. Roter Blagojević, PhD, Full professor; Marko S. Nikolić, PhD, Assistant professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The main objective is to inform students of the basic principles and theoretical assumptions that formulate the doctrine of cultural heritage preservation; its history, major theories and personalities, as well as international recommendations and concepts in the field of cultural heritage study, evaluation and protection. In addition, the aim is to become acquainted with modern scientific methodologies of studying, researching, documenting, valorisation, technical protection and presentation of the architectural heritage. The ultimate goal is for students to master the research skills necessary for scientific work in this field, as well as to apply contemporary theoretical concepts, principles and methodologies for the protection and revitalization of cultural and architectural heritage on specific topics and examples.		
Outcome of the subject Knowledge and understanding of the history and theory of research, evaluation, protection and revitalization of cultural and architectural heritage. Mastering the scientific methodology and its adequate application to specific problems and topics in the field of protection and revitalization of the architectural heritage. Ability to understand scientific literature; research work with sources and documentation; settings and analyzes of the subject matter, problems, goals, scientific hypotheses and research methods; as well as independent conclusions and critical evaluation of the achieved results and possibilities of their application on concrete examples in practice.		
Content of the subject <i>Theoretical education</i> Theories of the study and protection of the architectural heritage throughout history. Contemporary international charters and regulations in the field of preservation of cultural property and heritage. UNESCO and World Heritage Sites. Modern concepts and theories of protection of architectural heritage - sustainable development, intangible heritage, cultural landscape, cultural tourism, cultural routes. Problems and methods of research, documentation and evaluation. Evaluation and protection of 20th-century architecture and modern movements in architecture. <i>Practical education</i> Consultation with the teacher and independent research. Information with relevant general literature. Case study - work on collecting material and literature related to specific thematic research and problem, defining a theoretical framework of work, research in the field, analyzing the collected material, synthesizing and drawing conclusions through textual reasoning and making contributions.		
Recommended literature - Бранди, Ч. Теорија рестаурације. (Београд, 2007.) - Вученовић, С. Урбана и архитектонска конзервација, Европа. Свет. (Београд, 2004.) - Evropske konvencije i preporuke u oblasti kulturnog nasleđa. (Kotor, 2005.) - Jokilehto, J. A history of architectural conservation. (London, 1999.) - Културно наслеђе, избор најзначајнијих докумената Савета Европе у области културног наслеђа. (Београд, 2004.) - Часописи: Модерна конзервација, Наслеђе, Гласник ДКС, DOCOMOMO Journal и сл.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Mentoring work. Semester consultations for writing and seminar work.		
Evaluation of knowledge (maximum number of points 100) Written test – 30 points Seminar – 60 points Seminar presentation – 10 points		

Name of the subject: ON ARCHITECTURAL SPACE – CULTURE OF THE ARCHITECTURAL LANDSCAPE		
Teacher(s): Dragana M. Vasiljević Tomić, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Individual work within a complex studio design assignment, with a clearly defined critical overview of academic research, within the problematized field and its articulation through scientific architectural and artistic methodology is positioned as the main objective of work within doctoral studies.		
Outcome of the subject 1. Creative application of the visual arts and its importance and impact on architecture; 2. Creative application of comparable works during the design process within the studio, in terms of their conceptualization and representation. 3. Requirements and aspirations of the facilities' users; 4. Environmental impact of facilities and the principles of sustainable design; 5. How objects will fit into their contexts.		
Content of the subject The theoretical part of instruction provides the necessary scientific knowledge base within the set discourse. The lectures within the seminars refer to different disciplines and spheres, envisaged so that students understand the extent of possibilities for investigation in the design process, that is, comprehend the possibilities of research, providing and modifying (adapting) various scientific methodologies and approaches. Research through design starts from the basic, basic methodology of understanding the textual materials and materials of research discourse. Textual inquiry refers to the understanding of the text as a whole, for any given structure, with an emphasis on the recognition, application, or verification of theoretical postulates and design knowledge through the project, that is, contributing to the project and experiment adding to the creation and production of architectural design knowledge. The architectural design represents the practical part of teaching (working in a design studio), which enables students to master their architectural thematic skills, giving them the tools to translate values and attitudes defined through the base objectives of their ideas and design intentions into an architectural space, revealing ways that it can be realized.		
Recommended literature - G. L. Legendre (Ed.). AD Mathematics of Space. London: John Wiley & Sons Ltd., 2011. - Garcia, Mark (Ed.). AD Reader: The Diagrams of Architecture. London: John Wiley and Sons, 2010. - Harald Weinrich, LETA Umetnost i kritika zaborava, Beograd, Fabrika knjiga, 2008 - Lefebvre, Henry. The Production of Space, Oxford: Blackwell Publishing, 1991 - Marc Augé, Non-Places Introduction to an Anthropolgy of Supermodernity, 1995		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Classes are conducted in the studio with added constant discussions and presentations of topics relevant to the project assignment		
Evaluation of knowledge (maximum number of points 100) Activity: 10; Quality of research during the semester: 30; Seminar paper (60 points)		

Name of the subject: REVITALIZATION OF RURAL SPACES AND ARCHITECTURE		
Teacher(s): Aleksandar Č. Videnović, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The aim of the elective seminar proposed at the Doctoral Academic Studies in Architecture is to enrich, systematize and deepen the acquired ideas about rural territories, offsetting missed knowledge, about their specificities, principles of organization, typology and development of created interventions and spatial manifestations in rural landscapes. Bearing in mind that suburban areas and spontaneously generated villages cover 2/3 of the territory of Serbia, the aim is to awaken the affinity for PhD students with theoretical and empirical action in them, with an emphasis on the necessary awareness of the need for substantial revitalization and a radical turn in the future influx of science and profession. The proposed elective seminar is designed with the intention of affirming and adopting the principle of synthesis of ideological, spiritual, religious, cultural, ethnographic, sociological and other social-humanistic spheres as binding constraints, but also of enormous valuable impetus and creative motive in aesthetic and useful interventions that are more than necessary for rural areas to preserve their survival.		
Outcome of the subject Training of doctoral candidates for fully independent research, critical observation of the essence of the problem and making their own rational useful decisions. Character - pedagogical - psychological preparation of architects for quality work in the predominantly negative created atmosphere towards the village, rural environment and peasantry. Developing students' knowledge that villages and rural space are the nucleus of development of cities and urban structures, but also creating awareness that not every space may necessarily grow into a city. Creating a student sense of the importance of maintaining the measure while acting in space and of the need to find creative solutions to keep the village authentic in spatial manifestation, and superior to urban areas in terms of design, spatial comfort and aesthetics.		
Content of the subject <i>Theoretical education</i> Noticing invariable constants and patterns, good grounds and village roots. Identifying and diagnosing problems, negative impacts, circumstances that led to the deviation of rural settlements and territories, and consequently to the wrong strategies, plans and campaigns. Recognizing wrong doctrines and negative influences in the known relation, a commercialized city - an undeveloped village, the discontinuity of the development of rural territories and the loss of their identity. Consideration of the principles, aspects, opportunities and strategies for the revitalization of rural areas, with an attempt to find a realistic solution or a way to approach intervention in these sensitive environments. Critical review of current political, economic and interest attempts under the pretext of village renewal. Creating the right picture of possible new ideas and healthy approaches to this problem. <i>Practical education</i> It is planned through independent design of the topic (case studies, models) and student research, through mentoring and possibly group consultations and discussions on the topics.		
Recommended literature - Aranđelović, Bogdanović, Bosilkov, Veselinov, Videnović, Vidić, Vlahović, Vujović, Vukosavljević, Vuksanović – Macura, Grudova, Gurieri /Beli, Dimitrijević, Doksijadis, Đokić, Đorđević, Živković, Kanic, Karizis, Karadžić – Stefanović, Kojić, Kostić, Kovačević, Leki, Lukić, Maksin, Marić, Malešević, Malobabić, Mamford, Mendras, Milijić, Miteva, Mitrović, Milašin, Milić, Motsopoulos, Nikolić, Novaković, Novikov, Perišić, Petrović Z., Petrović B., Pešić –Maksimović, Radmanović, Raskin, Rašković, Ribar, Simonović, Stamenković, Stevanović, Findrik, Cvijić, Čirić, Škrabada, Šljukić...		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Lectures, presentations, case studies, discussions, student research, seminar papers, consultations, mentoring		
Evaluation of knowledge (maximum number of points 100)		
Semester work: 50 points in total	10 points - impression and activity during the semester 20 points - problematization and research process 20 points - seminar paper - colloquium	
Exam: 50 points total	30 points - seminar paper 20 points - study project at the program concept level	

Name of the subject: METHODICAL PRACTICUM		
Teacher(s): Vladimir B. Milenković, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Developing skills for systematization of methodological knowledge and participation in the process of teaching and/ or for facilitating the acquisition of the curriculum, and then understanding the ways of thinking and intelligence of those that the technical and methodological sense of education concerns. The aim is to train candidates for the conceptual, thematic and methodological formulation of the design process. In this regard, the focus is on textual interpretation of the methodological content of the design problem, being the material of the thematic study unit.		
Outcome of the subject The starting point is the assumption that there is no universal method that can literally solve one or more problems. Therefore, for successful education process it is significant to create certain automatisms and adopt the so-called cerebral localization and visualization of knowledge, which can be applied as skills to accomplish new tasks. Methodological guidelines affect the logical concluding that moves from the general to the particular and from the particular to the general, and in this sense the methodical practicum represents the functional interpretation of the selected thematic study unit.		
Content of the subject <i>Theoretical education</i> Discursivity and method, case study, instrumentalization of polyvalence, spiral design, meta-materiality, abstraction as a process, intuition as a method, paradoxes of incidence of methods, disappearance of architecture <i>Practical education</i> Lectures and exercises in accordance with thematic units of the curriculum		
Recommended literature – Berger, J. 2008. <i>Ways of Seeing</i> . London: Penguin. – Bourriaud, N. 2009. <i>Formes de vie – L’art moderne et l’invention de soi</i> . France: Denoel. – De Jonge, T.M., Van der Voordt, D.J.M. 2002. <i>Ways to Study and Research Urban, Architectural and Technical Design</i> . DUP Science. – Mosco, V. 2004. <i>Digital Sublime – Myth, Power and Cyberspace</i> . The MIT Press. – Scruton, R. 1979. <i>The Aesthetics of Architecture</i> . United Kingdom: Princeton University Press. – Spiridonidis, C., Voyatzaki, M., ed., 2007. <i>Teaching and Experimenting With Architectural Design: Advances in Technologies and Changing in Pedagogy</i> , ENHSA-EAAE Transactions on Architectural Education No.35. Thessaloniki: Charis Ltd. – Till, J. 2009. <i>Architecture Depends</i> . The MIT Press. – Šuvaković, M. 2010. <i>Diskurzivna analiza</i> . Beograd: Orion art.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Mentoring, lectures, presentations, examination		
Evaluation of knowledge (maximum number of points 100) Activity during semester = 30p Seminar paper (theoretical part) = 30p Lecture (practical part) = 30p Teacher’s impression = 10p		

Name of the subject: ARCHITECTURE, CULTURE AND THE CITY		
Teacher(s): Ana Z. Nikezić, PhD, Associate professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject Training students to understand the complex relationships and mechanisms that govern architecture and culture in the Conditions of Contemporary City Life. It is a contemporary context in which architecture and culture are viewed as multidimensional, complex and dynamic urban phenomena. The relationship between architecture, culture and the city is examined analytically and critically and clarified through various thematic frameworks, from culture as an everyday practice of life and lifestyle, through culture as a driver of regeneration to the impact of technology on globalization and virtualization of culture and society as a whole.		
Outcome of the subject Introduction to the mechanisms of the relationship between culture and the city. Understanding the complex structure of their relationship. Training for research in the local context.		
Content of the subject <i>Theoretical education</i> <ul style="list-style-type: none"> - Architecture, culture and city - conceptual definition - Elite and mass culture - Commercialization of culture and consumer society - Popular culture - Everyday life, lifestyle and domesticity - Technology and information society - Globalization of architecture and virtualization of culture - Spaces of culture and spaces for culture - Boundaries and fields - Use of culture - advantages and disadvantages (process of regeneration, revitalization, reuse, recycling, cultural industries, subculture, shopping mall, ...) - Fluid life - new readings of culture through architecture and the city (seductive power of transparency, unusual everyday life, cyborg architecture) <i>Practical education</i> Independent research (applied method depends on the chosen topic)		
Recommended literature Đorđević, J. (ur.) (2008). <i>Studije kulture</i> . Beograd: Službeni glasnik. Borden, I., Hall, T., Miles, M. (eds.) (2003). <i>The City Cultures Reader</i> . New York: Routledge. Gofman, E. (2000). <i>Kako se predstavljamo u svakodnevnom životu</i> . Beograd: Geopoetika. Bauman, Z. (2009). <i>Fluidni život</i> . Novi Sad: Mediterran. Harvey, D. (1991). <i>The Condition of Postmodernity: An Enquire into the Origins of Cultural Change</i> . New Jersey: Wiley-Blackwell. Friedland, R, Boden, D. (1995). <i>NowHere:Space, Time and Modernity</i> . Berkeley: UNI of California Press. Jameson, F. (ed.) (1991). <i>Postmodernism or, the cultural logic of late capitalism</i> . Durham: Duke Uni. Press. Lefebvre, H. (1995). <i>Writings on Cities</i> . Oxford: Blackwell Publishers Inc.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Lectures Independent research		
Evaluation of knowledge (maximum number of points 100) Small assignments (3 discussions, essays, explanations, etc., each on 2A4 pages) 30 Great task (seminar paper up to 3500 to 5000 words and forms according to the chosen topic) 70		

Name of the subject: MODEL OF MODEL		
Teacher(s): Zoran R. Abadić, Assistant professor		
Status of the subject: Elective seminar		
Number of ECTS points: 8		
Condition: Enrolled 4 th semester		
Goal of the subject The MODEL OF MODEL course deepens the theoretical and practical aspects of the structure and content of the elective course "Model in Architecture" that students choose during the first semester of the Master of Academic Studies in Architecture. Goal of the subject is the research of perception and intention of models, different useful properties of architectural models, possibilities of application, approach, methods and techniques of modelling important for achieving and controlling the desired degree of nonverbal communication, which opens a new field of interpretation and evaluation of architectural models. visual expression.		
Исход предмета Outcome of the subject is the improvement of the skills of the experimental representation of the model of architecture by modelling its appearance and utilitarianism by visual observation in the field of the art of architecture, film and photography.		
Content of the subject Theory consists of 6 thematic units: SPACE model CENTER CENTER OF THE MODEL EXPRESSION OF THE MODEL SPEECH model LIK model OPTICS of the model The practice consists of workshops that follow the thematic units of theoretical teaching: TRANSLATION / modeling of two-dimensional image architecture MODEL MODEL / experimental model shooting		
Recommended literature Healy Patrick. The Model and its Architecture. Rotterdam; nai010 publishers, 2013. OASE #84. Models The Idea the Representation and the Visionary. Rotterdam; nai uitgevers, 2011. Steven Holl. Scale. Zurich; Lars Muller Publishers, 2012. 430 p. Rudolf Arnhajm. Визуелно мишљење. Београд; Универзитет уметности у Београду, 1985. Rudolf Arnhajm. Уметност и визуелно опажање. Београд; Универзитет уметности у Бгд, 1987.		
Number of active classes: 6 (2+4)	Theory: 2	Practice: 4
Methods of delivering lectures Theoretical and practical		
Evaluation of knowledge (maximum number of points 100) Activity: 10; Quality of research during the semester: 30; Seminar paper (60 points)		

ELECTIVE COURSES
THEMATIC RESEARCH

Name of the subject: THEMATIC RESEARCH– 01-34			
Teacher(s): *			
Status of the subject: Elective			
Number of ECTS points: 20			
Condition: Enrolled 5 th semester			
Goal of the subject The final part of the study program of the Doctoral Academic Study - Architecture and Urbanism consist of three parts: (1) Thematic research, (2) Writing and defending the topic of the doctoral dissertation and (3) Writing and defending the doctoral dissertation. Working within thematic research through an independent process of research, formulation, conception and development of research tasks, the doctoral student independently connects all acquired knowledge and skills, masters the process of research, conceptualization, the definition of methodology and recognition of special research problems. Thematic research is focused on individual research at the highest and most complex level of doctoral studies, which includes research and processing of general and specific topics in accordance with the thematic framework. Using interpretive, qualitative, experimental, simulation, case studies as well as other research strategies, the doctoral student forms a corpus of information and data needed to work on the topic of the doctoral dissertation. The work on the thematic research aims to encourage and improve the research potential of the doctoral student and provide the knowledge needed for further work on the doctoral dissertation.			
Исход предмета Formulation of the subject of the research, research problem and definition of the topic - preparation for work on the application of the topic of the doctoral dissertation and preparation of the doctoral dissertation.			
Content of the subject Independent research work includes work on the necessary relevant and reference literature, research of contextual and historical facts as well as modern analogue theories and methodologies.			
Recommended literature Literature recommended by a potential mentor Literature suggested by the student and accepted by the potential mentor Scientific research methodology			
Number of active classes: 15	Theory: -	Practice: 10	Practice: 5
Methods of delivering lectures Mentoring Independent research			
Evaluation of knowledge (maximum number of points 100) Quality of research during the semester: 40; Final research (60 points)			

* Eva J. Vaništa Lazarević, Vladan A. Đokić, Lidija S. Đokić, Jelena A. Ivanović Šekularac, Vladimir M. Lojanica, Vladimir F. Mako, Marija L. Maruna, Milorad J. Mladenović, Branko D. Pavić, Ana P. Radivojević, Mirjana Z. Roter Blagojević, Mariela M. Cvetić, Nenad D. Šekularac, Dragana M. Vasiljević Tomić, Aleksandar Č. Videnović, Zoran N. Đukanović, Aleksandra M. Đukić, Jelena A. Živković, Dušan M. Ignjatović, Aleksandar M. Ignjatović, Ksenija Ž. Lalović, Vladimir B. Milenković, Vladimir M. Mihajlov, Ana Z. Nikezić, Uroš B. Radosavljević, Aleksandar N. Rajčić, Aleksandra B. Stupar, Budimir S. Sudimac, Žikica M. Tekić, Nataša D. Ćuković Ignjatović, Vesna P. Cagić Milošević, Ljiljana S. Đukanović, Danijela M. Milovanović Rodić, Aleksandra S. Nenadović