

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

...

Course Objective

Course Syllabus

...

Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

Faculty of Architecture, University of Zagreb

Master Degree Program in Architecture and Urban Planning

Catalog of Courses for Erasmus+ and Other International Students

(courses taught in English and/or taught in Croatian with consultative teaching in English / Italian / German / French and/or Spanish)

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
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Course Description

...
Course Objective

Course Syllabus

...
Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

189725

Sustainable Building I

/
Održivo građenje I

Assist. Prof. Mateo Biluš

**Summer - I semester –
 Compulsory course**

Language of instruction : Croatian

**Other languages for consultative
 teaching : English**

15 lectures/sem

1.0 ECTS

Contact:

Assist. Prof. Mateo Biluš
mateo.bilus@arhitekt.hr
 office no.: 101 / 1. floor

The course deals with the concept of building technology and design from the perspective of sustainability.

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Students are introduced to the topic of bioclimatic design, application of contemporary, ecological and traditional materials and technology, energy efficient improvements of current buildings and historical buildings refurbishment, international systems of building evaluation of buildings according to basic concepts of sustainability, advanced building installation systems and renewable energy sources.

Course objectives are development of technical skills of conceptual design process which meet contemporary requirements of sustainable building, from basic design approach to selection of materials, construction and technical systems selection as well as optimal usage of energy sources.

Course Syllabus

- 1.Elements of sustainable building and energy features of buildings
- 2.Bioclimatic conditions of building
- 3.Logic behind the choice of materials
- 4.Sustainable building with traditional and recycled materials
- 5.Logic behind technical system design / Contemporary heating and ventilation systems
- 6.Contemporary cooling and A/C systems
- 7.Renewable energy sources and their use in technical systems
- 8.Lighting in architecture – General overview
- 9.International systems of evaluation of buildings according to basic principles of sustainability
- 10.Conversion of industrial architecture
- 11.Rehabilitation of load-bearing structures
- 12.Rehabilitation of load-bearing structures
- 13.Energy rehabilitation of buildings
14. Building rehabilitation due to moisture...

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Other Teaching Methods and Assessment Strategies

- Seminar paper

Compulsory Reading

- Edwards, B; Turrent, D: Sustainable Housing, Principles & Practise, E&FN Spon, London, 2000
 -Roaf, S., Ecohouse 2, A Design Guide; Architectural Press, Linacre House, Oxford, 2003
 -Gonzalo, R., Habermann, K.J.; Energy-Efficient Architecture, Basis for Planning and Construction, Birkhäuser, Munich, 2006
 -Andrew Watts: Modern Construction Handbook.; Springer, Wien/New York, 2010
 -Rowland Mainstone, Developments in Structural Form, Architectural Press; 2 edition (October 16, 2001)
 -Klostermeier, C.; Wieckhorst, T.: Umbauen, Sanieren, Restaurieren, Bauhandwerk Band 1, Bauverlag BV GmbH, Gütersloh, 2006
 -Feireiss K., Feireiss L.(2008), Architecture of Change – Sustainability and Humanity in the Built Environment, Die Gestalten Verlag
 -Cost-Effective Building, Christian Schittich (Ed.), Edition in Detail, 2009
 -Bauen im Bestand, Schäden, Massnahmen und Bauteile - Katalog für die Altbauerneuerung, Bundesarbeitskreis, Altbauerneuerung e.V. (BAKA), Institut für Bauforschung e.V. (IFB), Rudolf Müller GmbH & Co.KG, Köln, 2006

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Additional Reading

Additional reading is determined by each mentor depending on the chosen subject

The student who successfully completes the course will be able to:

1. Promote the concept of bioclimatic approach to an architectural and urban planning project.
2. Evaluate buildings based on the sustainability concept and applied technological solution.
3. Identify advanced installation systems and renewable energy sources.
4. Interpret the principles of sustainable building in a contemporary architectural/urban design proposal.
5. Defend the significance of the sustainability concept in all elements of an architectural/urban design proposal.

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Course Description

... Course Objective

189732

Urban Planning Workshop 1: Planning of Settlements

/
 Urbanistička radionica 1:
 Planiranje naselja

Assoc. Prof. Lea Petrović
 Krajnik, Ph.D.

Language of instruction : Croatian

Other languages for consultative
 teaching : English / Italian /
 German / French / Spanish

Winter - I semester –
 Compulsory course

60 studio/sem

5.0 ECTS

Contact:
 Assoc.Prof. Lea Petrović
 Krajnik, Ph.D.
lpetrov@arhitekt.hr
 office no.: 108 / 1. floor

The course Urban Planning Workshop 2 aims to explore the possibilities of sustainable spatial development of a small town of 10 000 inhabitants within 10 to 15 years.

...
 The course aims to introduce the students to the methodology of drawing up urban plans (spatial planning regulation) for a smaller urban entity (1:2000). Headed by their supervisor, the students are expected to devise planning strategies and possibilities for the development of a particular area and at the same time preserve the cultural and historic heritage and natural resources.

The students draw up an urban planning proposal incorporating highly complex spatial, functional and design characteristics. They are expected to conceive and offer:

- The function and use of a particular area (town)
 - Proposal for building up an area
 - Preservation of cultural and historic assets, and natural resources
 - Public urban areas (squares, parks, promenades etc.)
- Solutions for parking facilities (parking lots, garages...)

Course Syllabus

... Methods and criteria of evaluation

Course Syllabus

As an open form of work and teaching, the workshop enables and encourages the student to develop critical thinking about the project, the medium they are using and the cultural situation. The mentor's task is to define the problem and its context and present it as a question which is explored by the student through the proposal of the planning design.

Elements of the assignment:

1. Analysis (of the existing situation, spatial planning documentation)
2. Evaluation of construction and landscape features (natural values, built heritage, tourism and development possibilities)
3. Problem chart
4. Planning programme □ numerical indicators
5. Concept proposal (spatial development of the settlement or part of the settlement with basic spatial and functional solutions, conditions and designs of individual spatial units)
6. Concept development (spatial organisation scheme □ The use of space, circulation system, proposal of the structure of construction)
7. Urban planning design – A detailed use of surfaces, 1:2,000 (urban development plan level)
8. Urban planning structure and composition – Building method, public space design, visual dominants in the space (floor plan □ working model), scale 1:2,000 (urban development plan level)
9. Textual description of the plan
10. Space rendering (3D simulations or a photograph of the model)

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Other Teaching Methods and Assessment Strategies

During the term, students submit graphic contributions on two occasions when set assignments will be checked. They prepare a seminar paper on a set topic related to the main assignment of the workshop. Regular attendance. A passing grade for the project and a presentation and explanation of the project.

Compulsory and Additional Reading

Compulsory Reading

1. Marinović-Uzelac, A. (2001): Prostorno planiranje, Dom i svijet, Zagreb, ISBN 410511020
2. Pegan, S (2010): Prostorno planiranje - zaštita prirode i okoliša - compendium predavanja, SZAF
3. Physical planning journals and magazines

Additional Reading

- Echenique, M & Saint, A. (2001) Cities for the New Millennium, London: Spon Press, ISBN 0-415-23183-3
- Graaflan, A. (ed.) (2001) Cities in transition, Rotterdam: 010 Publishers, ISBN 90-6450-415-6
- Jenks, M. & Burton, E., Williams, K. (1996) The Compact City, a Sustainable Urban Form?, Oxford: Spon Press, ISBN 0-419-21300-7
- Koolhaas, Rem (2001) Project on the city 2, Köln: Taschen GmbH, ISBN 3-8228-6047-6
- Short, J. R. (2001) The urban order, Oxford: Blackwell Publishers Ltd, ISBN 1-55786-361-x
- **** Zakon o prostornom uređenju i gradnji (Official Gazette 76/2007)
- **** Physical planning journals and magazines
- *** MPUGS (1999): Program prostornog uređenja Republike Hrvatske, Zagreb, ISBN 953-97403-1-2
- *** SPURH (2011): Smjernice i kriteriji za arhitektonsku vrsnoću građenja, MZOPUG Zagreb,
- ** Prostor, Znanstveni časopis za urbanizam, prostorno planiranje i pejzažnu arhitekturu, SZ, AF

The student will be able to:

- Single out the features of a wider spatial context relevant for establishing the relationship with the scope of the relevant plan.
- Assess the factors of spatial identity.
- Explain the starting points of planning based on set limitations and possibilities.
- Create a complete and rationalised design on the level of urban development plan.

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Course Description

...
Course Objective

Course Syllabus

...
Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

189728

Architectural Design Workshop I - Housing + / Radionica arhitektonskog projektiranja I – Stanovanje +

Assoc. Prof. Branimir Rajčić

Winter - I semester – Compulsory course

Language of instruction : Croatian

Other languages for consultative teaching : English

120 studio/sem

11.0 ECTS

Contact:
 Assoc. Prof. Branimir Rajčić
branimir.rajcic@arhitekt.hr
 office no.: 208/II. floor

The course focuses on a design project development examining new typology, complex large-scale programs and architectural principles of free topics. Design interior studio is an integral part of the workshop.

Architectural workshop is a form of research carried out through a design project which integrates knowledge and skills acquired in the previous years. The assignments set by a supervisor deal with complex architectural programs in a contemporary context encompassing issues relevant to the profession and space development as well as technical and technological innovations

...
 The workshop stimulates the development of critical thinking towards the program, medium used and culture. The supervisor's role is to define the issue and place it into the context of architectural project research. Professional and cultural context of the assignment as well as the suggested readings are included in the reader which introduces students to project work.

Visiting lecturers from the Faculty of Architecture and elsewhere broaden students' knowledge about the context of architecture and analogies with other disciplines as well as about multi-faceted aspects of the contemporary moment. Participation of experts in the fields of the built heritage, theory and history of art and architecture, structural systems, technical installations and architectural structures provides a sound basis for coping with these issues.

Project presentation and an exhibition are integral parts of the workshop. Students give presentations during the semester and at the end of it. They are expected to develop an ability to deal with complex architectural issues and critically evaluate new ones using the latest techniques, materials and structures.

Architectural Design Workshop I is based on investigational approach to housing. The workshop includes specific seminar papers, presentations and discussions during the term, as well as a final presentation of the project.

- 1 Introductory research – Defining the assignment,
- 2 Presentation of concepts,
- 3 Conceptual / Schematic design
- 4 Exhibition and presentation of students' submissions
5. Exhibition of selected submissions and presentation of the "Zdenko Stržić" award.

Course Requirements:
 Regular attendance, prepared and presented project
 Assessment Strategy :
 Students' knowledge is assessed through successfully completed project assignments

Compulsory Reading
 ...
 Additional Reading

- The student will be able to:
- Independently design a complex architectural and urban planning schematic design of a hybrid complex predominantly for housing use.
 - Create a technical and technological design of an architectural building according to the spatial and functional concept.
 - Integrate acquired theoretical knowledge with creative decisions.
 - Relate the thematic framework research process to the design process.
 - Categorise the relationship between the architectural building, the surroundings and the social relationships.
 - Develop the ability to make argued decisions related to the design process.
 - Explain the architectural project, in writing and orally, using conceptual, professional and technical representations.

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ECTS credit
Contact of Professor

Course Description

Course Objective

Course Syllabus

Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

189728

Modern Housing

/
Suvremeno stanovanje

Prof. Alenka Delić, Ph.D.

**Winter - I semester –
Compulsory course**

Language of instruction : Croatian

**Other languages for consultative
teaching : English**

15 lectures/sem

1.0 ECTS

Contact:

Prof. Alenka Delić, Ph.D
alenka.delic@arhitekt.hr
office no.: 208 / II. floor

Living accommodation is one of the most significant aspects in the development of town life. Through the theoretical part of the course and the workshop on modern dwellings, the course explores new (experimental) spatial systems in line with the changing needs, wishes and aspirations of residents, usage multifunctionality, the individualization of apartment block accommodation, participation, implementation of ICT, modern design with use of most modern technologies available, 'intelligent' environments and residential spaces alongside the strategy of sustainable development and an ecological approach.

Course Syllabus

- 1– Course introduction
- 2– Modern Movement in Croatia and Europe
- 3 – World urbanisation □ New visions
- 4– Family transformation
- 5– How to write a seminar paper – Guest lecturer
- 6 - Croatia – Zagreb □ urbanisation
- 7 -Croatia – Zagreb □ population – social structure
- 8 – Intelligent and sustainable housing
- 9– Number of floors and density
- 10– New directions in multi-family housing typology
- 11 - Globalisation, individualisation and ICT
- 12– Housing for various social groups
- 13 - Variability/flexibility in multi-family housing units
- 14 -Flexibility/variability/adaptability in the organisation of flats
- 15 – Housing surroundings

Other Teaching Methods and Assessment Strategies

Regular attendance of lectures and keeping up to date with course reading, active participation in discussions.

Compulsory Reading

- 1.Bruno Zevi: Znati gledati arhitekturu - ogleđ o interpretaciji prostora u arhitekturi Lukom d.o.o., 2000
- 2.Migayrou F., Brayer M. - ArchiLab –Radical Experiments in Global Architecture Thames&Hudson, London, 2001
- 3.Gausa M. – Housing: New Alternatives - New Systems Birkhauser Publishers, Basel, Boston, Berlin, Actar, Barcelona, 1998
- 4.Rademacher F. J.: Ravnoteža ili razaranje, Eko-socijalno-tržišno gospodarstvo kao ključ svjetskog održivog razvoja Intercon – Nakladni zavod Globus, Zagreb 2003

The student who successfully completes this course will be able to do the following independently:

DEFINE the problems of the construction of multi-family housing units and social structure of the society.

INTERPRET the quality of a design proposal for a multi-family housing unit construction and housing policies.

APPLY the knowledge of multi-family housing unit construction by applying contemporary technical and technological solutions to the research of new housing typologies.

EVALUATE the strategies for building new housing resources and reconstructing the existing ones.

DRAFT good-quality and innovative design proposals for various housing needs in accordance with socio-economic changes and adopt a strategy of sustainable development and an ecological approach.

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 Professor
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 Other languages for consultative
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 ECTS credit
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Course Description

*** Course Objective

Course Syllabus

*** Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

189731

Physical Planning

/
 Prostorno planiranje

Assoc. Prof. Lea Petrović
 Krajnik, Ph.D.

Summer - I semester –
 Compulsory course

Language of instruction : Croatian

Other languages for consultative
 teaching : English

15 lectures/sem

1.0 ECTS

Contact:
 Assoc.Prof. Lea Petrović
 Krajnik, Ph.D.
lpetrov@arhitekt.hr
 office no.: 108 / 1. floor

The course topics cover the general and specific knowledge of physical planning. The lectures will lead to understanding the processes that take place in a region. Urbanization. Basic elements involving in generating contemporary space structure. Traffic and the region. Industry and the region. Tourism. Typology of contemporary tourism zones. Agricultural and forest land. Landscape – basic terms and definition. Identity of space and the danger of its loss in the process of transformation and globalization. Basic principals of protection. Regions of specific characteristics – natural parks, natural reserves, national parks. Detailed methodology in preparing, ruling and application of physical plans

...
 The course is upgrade to the course “Introduction to Physical Planning”. The purpose of a course is to give detailed knowledge of physical planning in relation with contemporary generators of space consumers.

Definition of urban planning, and Physical and management Act. Functional characteristic and basic processes in the region. Basic elements involving in generating contemporary space structure. Urbanization. Traffic and its importance for the region. Traffic conditions of town locations and development. Commercial zones and industry zones in a region. Development of tourist zones and their typology. Agricultural and forest land. Landscape – basic terms and definition. Landscape and its identity. Identity of space and the danger of its loss in the process of transformation and globalization. Natural environment endangerment, and space protection. Historic overview of Natural heritage protection in Croatia. Regions of specific characteristics - National parks, Natural reserves and Natural parks. Methodology of preparing physical plans. Practical problems in preparing, ruling and application of physical plans.

1. Space management
2. “Europe in the World” – Territorial Evidence and Visions
3. “Scenarios on the Territorial Future of Europe” – ESPON research
4. Physical planning and spatial economics
5. Demographic indicators in physical planning
6. Regionalisation
7. Urbanisation and regionalisation
8. Urban concentrations
9. Traffic and infrastructure systems
10. Theory and methods of physical planning
11. Design in physical planning
12. Physical planning in the Republic of Croatia
13. Physical Planning Strategy and Programme of the Republic of Croatia
14. County physical plans
15. Physical planning terms, criteria and standards

Other Teaching Methods and Assessment Strategies
 - Written exam
 - Oral exam

Compulsory Reading

Marinović-Uzelac, A.: Prostorno planiranje, Dom i svijet, Zagreb, 2001., ISBN 410511020 Pegan, S.: Prostorno planiranje, compendium predavanja, AF, 2012

Additional Reading

Birch L. E. (Ed.) The Urban and Regional Planning (Reader), Routledge; London, New York, 2009.; ISBN– 10: 0-415-31997-8 Campbell, S. & alt.: Readings in Planning Theory, Blackwell Publ.; USA, “2nd ed., 2003., ISBN 0-631-2347-9 Evans, a. W.: Economics & Land Use Planning, Blackwell Pub., 2004, ISBN 1-4051-1861-X Hall, P. Urban and regional planning, 2002, ISBN 415-21776-6 Krugman, P., et al.: The Spatial Economy - Cities, Regions and International Trade; MIT Press, 1999, isbn 0262062046 Kunzmann, K.R. : Reflexionen über die Zukunft des Raumes, IRPUD, Dortmund 2006, ISBN 3-88211-138-0 Langenhagen, C.-R.: Raumordnung und Raumplanung, WBG, Darmstadt, 2005, ISBN 3-534-18792-X Maier, G. et al.: Regional- und Stadteconomie 1, Standorttheorie und Raumstruktur, Springer Verl., Wien, ISBN 3-211-27954-7 Maier, G., et al.: Regional- und Stadteconomie 2, Regionalentwicklung und Regionalpolitik, Springer Verl., Wien, ISBN 3-211-27955-3 McLoughlin, J.B. Urban and Regional Planning: A Systems Approach, Faber & Faber London, 1969. MVRDV: The Regionmaker RheinRuhrCity, ISBN 3-7757-1200-3 Plane, D. A. : Regional Planning, E.E. Publ. inc., Northampton, USA, 2007, ISBN -13: 978184542 0277 Pogačnik, A. Kako izdelamo prostorske načrte, Maribor, 2004., ISBN 961-230-288-X Prosen, A. (Ed.): Prostorne znanosti za 21. stoletje, Jubilejni zbornik, Ljubljana, 2004, ISBN 961-6167-71-5 RH, Savjet PURH: Izvešće o radu 2004.-2007., Zagreb, 2007, ISBN 78-953-6739-47-1 Šimunović, Ivo : Urbana ekonomika, Školska knjiga, Zagreb, 2007, ISBN 978-953-0-30341-6 Šimunović, Ivo.: Grad u regiji ili regionalni grad, Logos, Split, 1996, ISBN 953-6099-25-X Stimson, R et al.: Regional Economic Development: Analysis and Planning Strategy, Springer Verl.; 2006, ISBN-10 3-540-34826-3 Thornley, A. & Rydin, Y.: Planning in a Global Era, Ashgate Publ. Ltd., USA, 2002, ISBN 0 7546 1943 5 Vresk, M.: Grad i urbanizacija, Školska knjiga d.d., Zagreb, 2009, ISBN: 9530308655 Vrsek, M.: Osnove urbane geografije, Školska knjiga, Zagreb, 1977- Webster,

The student who successfully completes the course will be able to:

1. Identify social, economic, ethical and other starting points in physical planning.
2. Promote the significance of physical planning.
3. Demonstrate the criteria and procedures for development and protection of space.
4. Differentiate elements, divisions and organisation of planned space.
5. Draw instruments for physical planning implementation.
6. Provide examples necessary for contemporary understanding of physical planning processes.
7. Compare the physical planning design proposal with well-known examples.

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Course Description

Course Objective

Course Syllabus

Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

C., et al.: Property Rights, Planning and Markets, Managing Spontaneous Cities, E.E.Publ.Inc., 2003, ISBN 1-84064-904-6 *** Uberortliche Raumplanung (Teil 1) – www.ifoer.tuwien.at*** MZOPUG : Smjernice i kriteriji za planiranje golfskih igrališta, Zagreb, 2010 *** MZOPUG : Smjernice i kriteriji za arhitektonsku vrsnoću građenja, Zagreb, 2011 Prostorno planiranje u Europi ** EUREK, Europäisches Raumentwicklungskonzept, Auf dem Wege raumlich ausgewogenen und nachhaltigen Entwicklung der Europäischen Union, EU Kommission, 1999, <http://europa.eu.int.comm/regional/policy/sources>
Adams,N. et al.: Regional Development and Spatial Planning in a Enlarged European Union, England, Ashgate Pub.Ltd., 2006., ISBN -10: 0 7546 4714 5
Altrock, U., et al.: Spatial Planning and Urban Development in the New EU Memeber States, From Adjustmnet to Reinvention, Ashgate Publ. Ltd., 2006, ISBN 0 7546 4684 X
Faludi, A.,(ed.) : European Spatial Planning, Lincoln Institute of Land Policy, Cambridge Massachusetts. (2002), Larsson, G.: Spatial planning Systems in Western Europe, IOS Press, 2006, ISBN 1-58603-656-4

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 Language of instruction
 Other languages for consultative
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Course Description

Course Objective

Course Syllabus

Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

189726

Sustainable Building II

/

Održivo građenje II

Assoc. Prof. Zoran Veršić,
 Ph.D.

Winter - II semester –
 Compulsory course

Language of instruction : **Croatian**

Other languages for consultative
 teaching : **English**

15 lectures/sem

1.0 ECTS

Contact:
 Assoc. Prof. Zoran Veršić, Ph.D
zoran.versic@arhitekt.hr
 office no.: 101 / I. floor

Protection of building users, buildings and environment based on studying building physical features in terms of noise and fire.

During its life expectancy every building should fulfill building requirements and other conditions to ensure that they meet all building standards and proscribed laws and regulations. Buildings should be usable during certain lifetime.

Building requirements are present in the process of planning, designing and building.

Noise and fire protection are two requirements which every building should ensure. These requirements should be respected at building site selection, building design and building dimensioning and its parts, as well as at construction. This can be achieved by using specific structures and materials with specific characteristics.

...
 Building and equipment of building are in certain danger from the external influence. At the same time, its content and usage could present the endangering element to surroundings. It is planned to acquire knowledge and adopt methods for defining optimal architectural systems, materials and structures for protecting building users, buildings and environment.

Accordingly, from the first design phase and design process, architectural solutions of elements and applied systems have to be integrated to meet all the building requirements (noise and fire protection).

1.Physical properties of noise, psychological and physical meaning of noise

2.Noise (types of noise, noise impact on people)

3.Noise as the source of environmental pollution (noise protection design concept, traffic noise protection)

4.Legal regulations on noise protection and noise and sound insulation measurement

5.Requirements for building noise protection (as part of an urban planning and architectural design)

6.Requirements for building noise protection (outdoor noise protection, air and impact sound protection within a building, protection from the noise of equipment installed in the building, environmental protection from noise coming from building- related sources of noise, high reverberation noise protection)

7.Spatial acoustics and high reverberation noise

8.Materials for noise protection, examples

9.Burning and fire-extinguishing processes

10.Fire protection laws and requirements

11.Fire protection measures

12.Fire compartmentalisation of buildings

13.Evacuation routes

14.Fire protection materials

15.Fire protection design, examples

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 Course Requirements
 Regular attendance, seminar paper

Assessment Strategy
 Written and oral exam

Compulsory Reading

1. Tehnička enciklopedija, I.svezak - Akustika, IV. svezak - Elektroakustika, Hrvatski leksikografski zavod, Zagreb

2. W.Fasold, E. Veres, Schallschutz+Raumakustik in der Praxis, Verlag fur Bauwesen, 1998

3. M.Carević et al.: Tehnički priručnik za zaštitu od požara, Zagrebinspekt, Zagreb, 2002

Additional Reading

1 .Fischer, Lehrbuch der Bauphysik, Schall, Wärme, Feuchte, Licht Brand,, Klima, B.G. Taubner, Stuttgart, 1997

2. Zakon o zaštiti od buke (Official Gazette 20/03),

3. Pravilnik o najvišim dopuštenim razinama buke u sredini u kojoj ljudi rade i borave (Official Gazette 145/04)

4. Pravilnik o načinu izrade i sadržaju karata buke i akcijskih planova (Official Gazette 05/07)

5. Zakon o zaštiti od požara (Official Gazette 58-93, 33-05)

6. TRVB - Austrijske smjernice za zaštitu od požara

7 .NFPA 101 - Life Safety Code

Course Learning Outcomes

The student who successfully completes the course will be able to:

1. Differentiate legal regulations on noise and fire protection.
2. Evaluate buildings according to technological solutions for noise and fire protection.
3. Recommend the use of materials for noise and fire protection.
4. Identify the principles of spatial acoustics control.
5. Suggest architectural and urban planning designs which provide noise and fire protection.
6. Promote the importance of protecting a space from noise pollution.

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ECTS credit
Contact of Professor

Course Description

...
Course Objective

Course Syllabus

...
Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

189735

**Architecture in Croatian
Regions – Dalmatia**
/
**Hrvatski prostor i arhitektura -
Dalmacija**

Prof. Tin Sven Franić

**Summer - II semester –
Compulsory course**

Language of instruction : Croatian

**Other languages for consultative
teaching : English**

**48 seminar/sem
Field Course – 5 day trip**

2.0 ECTS

Contact:
Prof. Tin Sven Franić
tin-sven.franic@arhitekt.hr
office no.: 205 / II. floor

The site-specific course Croatian space and architecture - Dalmatia, offers general view into the Dalmatian architectural and urban heritage. The basic division of architectural discipline into urbanism, historical and contemporary architecture and architectural design, is used as a framework of the course's curriculum, which addresses natural resources, city's structures, architecture in urban or natural contexts, architecture for tourism and the architectural works by themselves. Itinerary of the tour is drafted in a way to emphasize the specific values of each of the site's characteristics -- in a range from cultural and historical specificities, terrain configurations, morphologies of the city's structures, to the distinctiveness of architects' works and current architectural and social issues -- in a sense of clarifying the origin of each or the architectural work and its valorization. During the four full days tour of the Dalmatian area from Nin to Dubrovnik, the course's itinerary is held according to the program. Site visitations and presentations along with the thematic lectures will take place in situ.

...
The course's main objective is acquaintance with the visited sites and familiarization with the Dalmatia's overall urban and architectural heritage, and together with that cultivation of critical stance towards the current issues of the discipline of architecture. The site-specific course, as an educational method, offers a way of immediate observation of cities and buildings in their actual environment. The guidance, with its program, evaluation and selection criteria of the chosen samples and in situ exposés, attempts to inform the students with specificities of this kind of immediate communication in the discipline of architecture. This site-specific course which is also an educational method is based not only upon the creative origins of the prominent twentieth century architects but also upon their architectural precedents.

Itinerary: Nin, Zadar, Šibenik, Trogir, Split, Brela, Makarska, Vidušica, Naron, Ston, Trsteno, Dubrovnik. The course includes both the tutors of the Faculty of Architecture and appropriate experts in other disciplines as well as architects whose quality of work has made a special mark on the region of Dalmatia. During the visit, students will graphically record, photograph and analyse the cities and buildings visited. After the trip, they should choose a series of relevant examples from their diaries and reproduce them in an originally designed booklet along with accompanying expert commentary. The booklet should then be submitted as a seminar paper – Fieldwork Diary. (Depending on the possibilities of the Faculty, the syllabus may be extended to the area from Pag to Cavtat, the islands, and Dalmatian hinterland; also, a study trip to Vienna may be organised for students in the winter term of the graduate programme).

NOTE:

This is field course along Dalmatian coast (from Zadar to Dubrovnik), planned as 5-day trip in the April. For the trip, accommodation in hotels and full board students participate with cca 1000 HRK. By selection of this course in Learning Agreement, student is willing to take part at the course and trip and pay participation of cca 1000HRK upon arrival at the Faculty.

...

Course Requirements
Field course active attendance.

Assessment Strategy
Seminar paper – Fieldwork Diary

Compulsory Reading

1. Uchytíl, A., Barišić Marenić, Z. (ed.) (2000), Dnevnik terenske nastave – Dalmacija (guidebook for students), Arhitektonski fakultet Sveučilišta u Zagrebu, Zagreb (Authors: A. Uchytíl, T. Žarnić, Z. Barišić, M. Kovačević, A. Kuzmanić, A. Vulin, N. Kozulić)
2. Uchytíl, A., Žarnić, T., Karač, Z., Barišić, Z. (1998), Elementarni arhitektonski vodič – Dalmacija, Arhitektonski fakultet Sveučilišta u Zagrebu, Zagreb
- 3.***(1998-2010), Hrvatski prostor i arhitektura – Dalmacija - separati terenske nastave Dalmacija, Uchytíl, A., Arhitektonski fakultet Sveučilišta u Zagrebu, Zagreb
4. Separati terenske nastave-Dalmacije

Additional Reading

1. HPA-Dalmacija, repozitorij-biblioteka

On successful completion of the course, the student will be able to:

1. Identify the most important historical and modern architectural achievements in the Dalmatian region.
2. Understand the origins of the creation of historical and contemporary architectural achievements visited.
3. Present basic spatial characteristics of historical and contemporary architectural achievements visited.
4. Draw basic spatial features of the architectural achievements visited.
5. Promote the architect's responsibility towards the preservation of the value of natural and built environment.

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

*** Course Objective

189733
Urban Transformations
 /
Urbane preobrazbe
Prof. Krunoslav Šmit, Ph.D.
Summer - II semester –
Compulsory course
 Language of instruction : **Croatian**
 Other languages for consultative
 teaching : **English**
 15 lectures/sem
 1.0 ECTS

Introduction to city development and urban planning concepts in the world and in Croatia in the 20th century. The course content is presented chronologically. The students are introduced to urban transformations as well as to the impact of social, economic and political changes on urban fabric transformation. It also provides insight into special aspects of transformation.

...
 The aim of this course is to introduce students to the processes of continuous urban transformation as well as the contemporary urban transformation in Croatia and worldwide. Students are taught to recognize and develop critical thinking about urban planning concepts and their impact on the recent events at home and worldwide.

Contact:
 Prof. Krunoslav Šmit, Ph.D.
krunoslav.smit@arhitekt.hr
 office no.: 110/ I. floor

Course Syllabus

*** Methods and criteria of evaluation

1. Development of urban space concept (20th century)
2. 19th/20th century: types of cities: linear, garden, industrial, new block (New Amsterdam)
3. Urban transformation between the two World Wars in Croatia and worldwide
4. Werkbund, Bauhaus, CIAM
5. 20th century functionalism and a trend for a modern city
6. City and totalitarian regimes (fascism)
7. Concepts of urban fabric after World War II
8. Development of the cities after World War II in Croatia
9. New City of the 20th century (English and Scandinavian new cities, Brasilia, Chandigarh, Canberra...)
10. Urban utopias of the 20th century
11. Typological and morphological elements of urban transformations in the 1970s and 1980s
12. Contemporary urbanism in the world
13. Contemporary urbanism in Croatia
14. Socio-economic and socio-political aspects of city transformation in the early 21st century
15. discussion on contemporary city planning theories and urban transformations (hybrid city, cinematic city, virtual city, , network city, cyborg city, buzz city, intransitive city, informational city, creative city, - seminar

- preliminary exam
- seminar paper (min. 7 pages) on the topic of urban transformations

- ...
 Other Teaching Methods and Assessment Strategies
 - Mid-term exam
 - Seminar paper (seven standard pages min.) on urban transformations
 Other Teaching Methods and Assessment Strategies
 - Mid-term exam
 - Seminar paper

Compulsory and Additional Reading

- Compulsory Reading
1. Graafland, A. (2001) Cities in transition, Rotterdam
 2. Frampton, K. (1992) Moderna arhitektura - Kritička povijest, Globus nakladni zavod, Zagreb, ISBN 86-343-0647-X
 3. Deakin, M.; Mitchell, G.; Nijkamp, P.; Vreeker, R. (2007) Sustainable Urban Development, London ISBN 978-0-415-3221
 4. Zevi, B. (2006), Povijest moderne arhitekture, Arhitektonski fakultet, Golden marketing, Zagreb
 5. Ellin, N. (1999)– Postmodern urbanism, Princeton architectural press, New York,
 6. Andrusz, G; Harloe, M.; Szelenyi, I. (1996) Cities after socialism – Urban and regional changes and conflict in post- socialist societies, Blackwell Publishers Inc Oxford, UK
 7. Low, S.M. (2006) Promišljanje grada, Jesenski i Turk, Zagreb, ISBN 953-222-205-7

- Additional Reading
1. Jukić, T. (1997) Strukturalne promjene rubnih dijelova grada-prilog proučavanju urbanističkog razvoja, disertacija
 2. Ellin, N. (2006) Integral urbanism, Routledge, New York
 3. Colquhoun, I. (1995) Urban Regeneration, B.T. Batsford, Ltd-London, ISBN 0 7134 7087 9
 4. -----, (2000) Wien, Stadterhaltung, Stadterneuerung; Stadtplanung Wien,
 5. -----, The transformation on the city space on the background of political-economic changes in central Europe
 - Examples of contemporary urban transformations from recent examples of modern urban transformations from recent trade journals
 6. Castex, J; Depaule, J.C.; Panerai, P. (2003), Urbane forme, Građevinska knjiga, Beograd
 7. Hubbard, P. (2006) City, Routledge, London, ISBN 978-0-415-33100-5.

Course Learning Outcomes

- On completion of this course, the student will be able to:
1. Provide examples of development of urban space of cities important for contemporary understanding of urban transformations.
 2. Analyse urban planning tendencies in Croatia and abroad.
 3. Interpret typological and morphological elements of urban space transformation.
 4. Interpret the acquired knowledge during preparation of urban development design.
 5. Compare the urban development design with well-known examples.

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

*** Course Objective

The course is focused on a systematic and comprehensive planning of complex residential and business city areas and their integration into the existing planned urban fabric.

Emphasis is placed on planning public social, commercial and office buildings along with residential housing as the main component of a city. Special emphasis is put on planning new public areas (street, square, parks...). Residential and office buildings are planned on the level of a detailed development plan in the selected unregulated city areas which require intervention in the form of redevelopment, addition or new construction. Planning residential and business urban areas should be coordinated with the use and preservation of the existing values and sustainable construction.

...
The course aims to teach students how to analyze, conceive and work out a high-quality solution for a residential and business city area which should structurally, functionally and programmatically fit into the existing urban fabric.

The course offers an overview of urban planning as a complex interdisciplinary process. It gives knowledge about function and design of particular city areas, urban space management as well as planning procedures and strategies of controlled development. Emphasis is placed on residential and business urban areas and their relationship with other urban areas and their functions. The course develops skills needed for the comprehension of a large scale as a framework for assessment, comparison and planning of residential and business urban areas and their relationship with the city as a whole.

Course Syllabus

*** Methods and criteria of evaluation

As an interactive teaching form, the workshop enables and encourages students to individually explore and develop the methods for analysis, preparation and presentation of an urban area development plan. The mentor's task is to define and explain the assignment and direct and guide students through the process of preparation of an urban area development plan. Elements of the assignment:

1. Analysis and presentation of the existing state (scale 1:5,000) and planning documentation
2. Analysis and presentation of reference examples
3. Problem chart □ Limitations and possibilities of space utilisation development (scale 1:5,000)
4. Planning programme with the calculation and identification of urban planning indicators
5. Concept proposal □ Spatial organisation scheme (scale 1:5,000)
6. Concept development and presentation □ Planned spatial structure
7. Development of the concept and design of a broader zone □ A detailed intended use of the space and structure proposal (scale 1:5,000)
8. Urban design □ The level of detailed development plan of an urban area (scale 1:1,000)
9. Detailed urban design □ Site plan with the rendering of the fifth façade, characteristic sections and elevations (scale 1:1,000)
10. Detailed urban design □ Site plan with ground-level floor plans
11. Floor plans of all characteristic below-ground and above-ground storeys as well as sections of buildings within a narrow zone (scale 1:1,000)
12. Written explanation of the plan and identification of urban planning indicators
13. Details of urban space development
14. Space rendering
15. Exhibition staging and successful presentation and argumentation of the project assignment

Other Teaching Methods and Assessment Strategies

-During the term, students prepare written and graphic submissions and briefly present analyses and phase-by-phase designs to other students and experts. They exhibit the final result of their work at the final exhibition and publicly present and explain the project. Their project is also published in a publication.

Compulsory and Additional Reading

Compulsory Reading
Suggested compulsory and additional reading for the following courses of the Department for Urban Planning, Physical Planning and Landscape Architecture:

Urban Transformations, Urban Planning I, Urban Planning II, Urban Planning III, Landscape Architecture, Public Urban Space Development, Utility Development in Settlements, Urban Transportation Design Issues, History of European Urban Planning, Physical Planning, and others.

Additional Reading

- 1.*** Recent examples from magazines for architecture and urban planning (programme archive)
- 3.*** Urban planning regulation
- 4.*** (2001-2006), Prostorni plan grada Zagreba, Official Gazette of the City of Zagreb 8/2001, 16/2002, 11/2003 and 2/2006, Zagreb
- 5.*** (2007-2008), Generalni urbanistički plan grada Zagreba, Official Gazette of the City of Zagreb 16/2007, 2/2008 and 6/2008, Zagreb
6. Adopted reference development plans and detailed plans for development (Decisions on adoption published in the Official Gazette of the City of Zagreb) and publications of reference urban planning and architectural competitions.

Course Learning Outcomes

On successful completion of the course, the student will be able to:

1. Develop the programme of an architectural and urban planning project of a mixed residential/commercial part of the city.
2. Interpret the city as a complex whole with carefully planned amenities and programme.
3. Interpret the knowledge of urban space management and planning procedures and controlled development measures.
4. Compare mixed residential/commercial parts of the city according to a group of adopted criteria.
5. Prepare a preliminary study of the urban transformation of a part of the city.

189734

**Urban Planning Workshop 2-
Transformation of the City**
/
**Urbanistička radionica II-
Preobrazba grada**

Prof. Krunoslav Šmit, Ph.D.

**Summer - II semester –
Compulsory course**

Language of instruction : Croatian

**Other languages for consultative
teaching : English / Italian /
German / French / Spanish**

60 studio/sem

5.0 ECTS

Contact:
Prof. Krunoslav Šmit, Ph.D.
krunoslav.smit@arhitekt.hr
office no.: 110 / I. floor

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

*** Course Objective

Course Syllabus

*** Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

189730

**Architectural Design
 Workshop 2 – Sport+ /
 Radionica arhitektonskog
 projektiranja II - Sport +**

Assoc. Prof. Vanja Rister

**Summer - II semester –
 Compulsory course**

Language of instruction : Croatian

**Other languages for consultative
 teaching : English**

120 studio/sem

11.0 ECTS

Contact:

Assoc. prof. Vanja Rister
vanja.rister@arhitekt.hr
 office no.: 209 / II. floor

Architectural workshop 2 'sport+' is a form of research through design which explores more complex architectural programs in the contemporary context, emerging occurrences in society, discipline and space, technical and technological discoveries. It consolidates knowledge attained in previous years of study, and visiting lecturers contribute to the broadening of knowledge of the context within which architecture emerges, the analogies with other disciplines, and the multifaceted aspects of contemporariness. Research is focused toward the growth of a new model of sport facilities with added programs which enable a broader social impact. The given sport-oriented content is transformed through both the project and the added program into a new type of social centre. This program +, which the student defines individually, has to be a result of completed research of various contexts within the assignment. The subject frame includes unencumbered space, construction rhetoric, the relation of served and serving space, sustainable building, spatial vs. material organization, cross/trans/disprogrammimg and other themes upon which a certain assignment relies. The assignments are carried out in bi-semesteral cycles.

The projects explore how the language of architecture articulates and describes specific function/s, spatial character and the choreography of usage, the public appearance of a building, the aspect of sustainability, continuous uptime in the social sense, adaptability etc.

...

The workshop as an open form of work and teaching enables and encourages the student to develop a critical regard toward the program, the implemented medium and culturological situation. The mentor defines the problem and its context and presents it to the student as a question which he then researches through an architectural project. The student comes to an understanding of complex parameters, spanning from conceptual to technical ones, from which architecture emerges and, along with the project, develops an understanding for the argumentation of ones decisions. Ability to solve more complex architectural problems and to critically engage in new occurrences is also developed while using the newest technical tools, materials and construction.

Architectural Workshop II is based on intensive studying of a design problem and investigative approach to architectural design. The workshop includes targeted seminar papers, joint presentations and discussions during the term. It also includes a final presentation and project presentation.

It is conducted following the steps below:

1. Thematic context study □ seminar paper
2. Preliminary study
- Additional programme definition Site analysis
- Site plan study using real models
- Representation of architectural type, materialisation and spatial organisation forms Use scenario
- Space rendering
- Other contributions which explain the concept Concept presentation
3. Schematic design
- Site plan (broad context), scale 1:2,000 Site plan, scale 1:1,000
- Floor plans, sections, fronts, scale 1:200 Characteristic section, scale 1:100 Characteristic details, scale 1:20 Structure scheme, scale 1:500
- Model of the structure, scale 1:200, or a specific element in an appropriate scale Space rendering of the structure and its surroundings and interior
- Tehnickal description
4. Exhibition and presentation of works

Other Teaching Methods and Assessment Strategies:

- Project assignments, seminar papers, presentations, successful project presentation and argumentation

Compulsory Reading
 Reader (compilation) contains excerpts from compulsory reading and references additional reading. It changes according to the thematic framework of the project assignment.

Additional Reading
 Current trade journals and monographs

1. Students will be able to independently produce a highly complex preliminary architectural and urban planning design.
2. Students will be able to creatively develop a technical and technological design of an architectural structure in relation to the spatial and functional concept.
3. Students will be able to creatively connect the process of researching a thematic framework of an architectural problem with design decisions.
4. Students will be able to modify the heritage of functional typologies according to contemporary requirements.
5. Students will be able to interpret theoretical concepts through their design decisions.
6. Students will be able to critically assess the relationship between an architectural structure and the urban or natural surroundings, as well as its social influence.
7. Students will be able to develop a programme for a social-purpose architectural structure.
8. Students will be able to explain the architectural design and explain complex conditions in which a highly complex architectural structure is built.
9. Students will be able to provide an in-depth explanation of an architectural project using conceptual and technical representations and illustrations, in writing and orally.

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

*** Course Objective

15 lectures of 45 minutes each, consisting of historical, methodological, and technical data as well as debate on the architecture of sports facilities: sports halls, swimming pool facilities and stadiums.

...
 Student should be trained and informed through the acquisition of broad normative, technical, cultural and methodological knowledge in the field of sports as a subject of producing architecture. Preparation and introduction to the method of normative dimensioning and designing sports facilities.

189729

Sports Facilities

/
Zgrade za sport

Prof. Vladimir Kasun

Summer - II semester

Language of instruction : **Croatian**

Other languages for consultative
 teaching : **English**

15 lectures/sem

1.0 ECTS

Contact:
 Prof. Vladimir Kasun
vladimir.kasun@arhitekt.hr
 office no.: 209 / II. floor

Course Syllabus

*** Methods and criteria of evaluation

1– SPORTS PHENOMENOLOGY AND FORMS OF ARCHITECTURE
 Methodic reduction, sport-notion, sports participants - "bodytheatre", sport – a global phenomenon, sports and the city, origins of forms of sports facilities, structure rhetorics
 2– POOLS HISTORY- Man and water, artefacts, Greece, Rome, Christianity, re-affirmation of water, contemporary pools,
 3 – FUNCTIONAL SCHEMES OF POOLS
 4 – SWIMMING POOL BASIN – Finnish overflow system, pool technique
 5 – SPORTS HALLS – Functional schemes, types
 6 – SPORTS HALLS – Norms, playgrounds
 7 – SPORTS HALLS – Terraces, technique
 8 – SPORTS HALLS, SWIMMING POOLS – Specific examples - Lecture: GUEST
 9- STADIUMS – History
 10- STADIUMS – Norms, functional schemes, types
 11 – STADIUM HALLS, ARENAS
 12– MODERN OLYMPIC GAMES (1896-1952)
 13– MODERN OLYMPIC GAMES (1956-2012)- Lecture: GUEST
 14– SPORTS COMPLEXES □ "Hybrid architecture"
 15 – PREVIOUS 10 YEARS

Other Teaching Methods and Assessment Strategies
 - Seminar paper

Compulsory and Additional Reading

- ZGRADE ZA SPORT – Lecture notes – Prof. Emil Špirić, PhD
 - ENCIKLOPEDIJA FIZIČKE KULTURE
 - SPORTSKA ENCIKLOPEDIJA
 - MODELI FIZIČKE KULTURE – svezak VII – posebni uvjeti građenja i opremanja objekata fizičke kulture: RSIZ fizičke kulture RH, 1987
 - NEUFERT E. -
 - STADIA - A DESIGN AND DEVELOPMENT GUIDE: Geraint John, Rod Sheard, Architectural Press, 2001
 - SPORTS ARCHITECTURE: Rod Sheard, Spon Press, London&NY, 2001
 - ARCHITECTURE FOR SPORT - NEW CONCEPTS AND INTERNATIONAL PROJECTS FOR SPORT AND LEISURE; Peter Sturzebecher, Sigrid Ulrich; Wiley-Academy, 2002
 - SPORTS AND LEISURE: Architecture in Finland, SAFA 1977
 - SPORTSKA ARHITEKTURA U ZAGREBU – Ariana Štulhofer, Zgb. 2005 □ izdanje Af

 Additional Reading:
 - Preporuke za projektiranje, izgradnju i održavanje športskih dvorana i igrališta u Zagrebu – 2. svezak: Zagrebački športski savez, Zagreb, June 2007
 - Preporuke o održivom programiranju, prostornom planiranju i projektiranju javnih plivališta u gradu Zagrebu – 3. svezak: Zagrebački športski savez, Zagreb, April 2008
 - STADIEN 2006 – DER FUSSBALLWELTMEISTERSCHAFT; Gernot Stick, birkhauser, 2005
 Architectural periodicals:
 - s & b - sport&baeder – Magazine for Sports Architecture
 - Casabella, 694/2001, new stadia
 - Architectural Review 1146/1992 – OI Barcelona
 - Architectural Review 1182/1994 – OI Atlanta
 - Architectural Review 1186/1995
 - Architectural Review 1244/2000 – OI Australia
 - Baumeister 8/1992. – OI Barcelona
 - l'ARCA 122/1998 – SPORTS FACILITIES
 - AW – architecture+wettbewerb 188/2001 – Buildings for Sport and Leisure

Course Learning Outcomes

Course Learning Outcomes
 On successful completion of the course, the student will be able to:
 1.Evaluate contemporary sports architecture in the context of its historical development.
 2.Critically assess the relationship between the function, structure and form of a sports facility.
 3.Interpret the phenomenological conditionality of sports architecture.
 4.Explain architectural examples important for the development of the contemporary approach to an architectural sports facility project.
 5.Interpret elements and functional schemes of certain types of sports facilities.
 6.Draw a project programme for a sports facility.

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

...
Course Objective

Course Syllabus

...
Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

192514

Interior Workshop

/

Radionica interijera

Prof. Dina Vulin Ileković, Ph.D

**Winter - III semester –
Compulsory course**

Language of instruction : Croatian

**Other languages for consultative
teaching : English**

45 studio/sem

3.0 ECTS

Contact:

Prof. Dina Vulin Ileković, Ph.D

dvulin@arhitekt.hr

office no.: 206 / II. floor

The course focuses on a design project development examining new typology, complex large-scale programs and architectural principles of free topics. Design interior studio is an integral part of the workshop.

Architectural workshop is a form of research carried out through a design project which integrates knowledge and skills acquired in the previous years. The assignments set by a supervisor deal with complex architectural programs in a contemporary context encompassing issues relevant to the profession and space development as well as technical and technological innovations.

...

The workshop stimulates the development of critical thinking towards the program, medium used and culture. The supervisor's role is to define the issue and place it into the context of architectural project research. Professional and cultural context of the assignment as well as the suggested readings are included in the reader which introduces students to project work.

Visiting lecturers from the Faculty of Architecture and elsewhere broaden students' knowledge about the context of architecture and analogies with other disciplines as well as about multi-faceted aspects of the contemporary moment. Participation of experts in the fields of the built heritage, theory and history of art and architecture, structural systems, technical installations and architectural structures provides a sound basis for coping with these issues.

Project presentation and an exhibition are integral parts of the workshop. Students give presentations during the semester and at the end of it. They are expected to develop an ability to deal with complex architectural issues and critically evaluate new ones using the latest techniques, materials and structures.

Architectural workshop is based on an intensive study of architectural issues and a research-based approach to architectural design. It includes seminar work, presentations and discussions during the semester as well as a final project presentation.

Work is organized in groups of 10 students under the supervision of tutors and their associates.

....

Regular attendance. Completed Interior project. Positively graded project presentation.

Professional journals and monographs: selection according to the chosen assignment

1. Choose information and criteria important for the development of an interior project.
2. Develop an interior project assignment which can be identified in a real-life, everyday context.
3. Independently design interior as integral part of architectural documentation.
4. During the creation of the interior project, creatively suggest a construction solution and appropriate use of materials, colours, lights, technical and technological components in order to achieve an aesthetically pleasing and functional spatial organization and articulation.
5. Present the details of the interior project using graphics and written or oral descriptions.
6. Critically evaluate an architectural interior project.

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

*** Course Objective

Framework of course content

The Auditory Workshop applies the pedagogical principle of *docendo discimus* (“we teach by learning”) through active participation of the students, developing creative criticism through the set oppositions: artificial/natural; abstract/material; gestural/structural; conceptual/contextual; incentives/determinations; continuous/discontinuous; articulated/inarticulated;

Development of general and specific competences – knowledge and skills:

Linking theoretical thinking with the design process, reflecting a specific architectural educational process from the basic to the complex. Interaction between artistic and specific architectural modes.

192512

Auditory Workshop

/

Auditorna radionica

Prof. Tin Sven Franić

Winter - III semester –
Compulsory course

Language of instruction : Croatian

Other languages for consultative
teaching : English

45 studio/sem

1.0 ECTS

Contact:

Prof. Tin Sven Franić
tin-sven.franic@arhitekt.hr
office no.: 205 / II. floor

Course Syllabus

*** Methods and criteria of evaluation

Course curriculum

- spacious / flat
- simple / complex
- analytical / synthetic
- mystical / spiritual
- abstract / material
- spontaneous / meaningful
- active / passive
- visible / invisible
- scientific / artistic
- subject / non-subject
- open / hidden
- finished / unfinished
- deductive / inductive
- conceptual / contraceptive
- modern / contemporary
- time layers / moment
- dependence / independence
- determinations / incentives
- rational / irrational
- analysis / game
- metaphor / quote
- sensory / physical states
- sketch / thought recording
- stereotomic / tectonic
- gestural / structural
- voluminous / transparent
- discontinuity / continuity
- membrane determination / boundaries
- permeable / impermeable
- transparent/non-transparent
- articulated / non-articulated
- enigma of measure / scale

Requirements for obtaining a signature

Regular class attendance.

Type of exam

Seminar paper and discussion on one of the proposed topics, explained in front of the study group and the course lecturer.

Compulsory and Additional Reading

Compulsory literature

- 1 Le Corbusier, 1985: *Towards a new architecture* (original title: *Vers une architecture*). Dover Publications.
- 2 Eco, U., 1965: *Otvoreno djelo* (original title: *Opera aperta*). Translation: N. Miličević). Veselin Masleša, Sarajevo.
- 3 Frampton, K., 1992: *Moderna arhitektura: kritička povijest*. Globus, Zagreb.
- 4 Frampton, K., 2001: *Studies in tectonic culture: the poetics of construction in nineteenth and twentieth century architecture*. The MIT Press, Cambridge, Massachusetts.
- 5 Hertzberger, H., 1991: *Lessons for students in architecture*. 010 Publishers, Rotterdam.
- 6 Hertzberger, H., 2000: *Space and the architect: Lessons in architecture 2*. 010 Publishers, Rotterdam.
- 7 Norberg-Schulz, C., 1966: *Intentions in architecture*. MIT Press, Cambridge, Massachusetts.
- 8 Siza, A., 2006: *Zapisi o arhitekturi* (original title: *Scritti di architettura*). Translation: J. Gudelj). AGM, Zagreb.
- 9 Van Eyck, A., 1979: *The enigma of size*. Signs and insights: annual report Urbino 1979. International laboratory of architecture and urban design 1979: 42–53
- 10 Venturi, R., 2008: *Complexity and contradiction in architecture*. The Museum of Modern Art, New York.
- 11 Zumthor, P., 2003: *Misliti arhitekturu* (original title: *Architektur Denken*). Translation: D. Barbarić). AGM, Zagreb.

Additional literature

- 1 Baudrillard, J., Nouvel, J., 2008: *Singularni objekti: arhitektura i filozofija* (original title: *Les objets singuliers: architecture et philosophie*). Translation: L. Kovačević). AGM, Zagreb.
- 2 Boudon, P., 2006: *O arhitektonskom prostoru: eseji o epistemologiji arhitekture* (original title: *Sur l'espace architectural*). Translation: M. Bekić Milinović). Institut za povijest umjetnosti, Zagreb.
- 3 Conrads, U., 1997: *Programi i manifesti arhitekture XX. stoljeća* (original title: *Programme und Manifeste zur Architektur des 20. Jahrhunderts*). Translation: N. Petrak). Psefizma. Udruženje hrvatskih arhitekata, Zagreb.
- 4 Harries, K., 1998: *The ethical function of architecture*. MIT Press, Cambridge, Massachusetts.
- 5 Hartoonian, Gevork, 1997: *Ontology of construction: on nihilism of technology in theories of modern architecture*. Cambridge University Press, Cambridge; New York.
- 6 Rasmussen, S. E., 2000: *Experiencing architecture*. MIT Press, Cambridge, Massachusetts.
- 7 Tschumi, B., 2004: *Arhitektura i disjunkcija* (original title: *Architecture and disjunction*). Translation: S. Kalčić). AGM, Zagreb.

Learning outcomes of this course

Upon successful completion of this course (presented seminar paper), the student will be able to:

- integrate specific theoretical considerations into the design process;
- develop an architectural creative process from simple to complex;
- contrast certain specific architectural modes;
- choose specific architectural modes according to the particularities of the architectural or urban planning project;
- identify universal architectural principles that argue for an independent architectural choice.

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

...
Course Objective

Course Syllabus

...
Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

192516

Workshop 3: Architectural Design
 /
Radionica 3: Arhitektonsko projektiranje

Prof. Idis Turato, Ph.D.

Winter - III semester – Compulsory course

Language of instruction : Croatian

Other languages for consultative teaching : English / Italian / German

150 studio/sem

14.0 ECTS

Contact:
 Prof. Idis Turato, Ph.D.
 iturato@arhitekt.hr

Various tasks each semester.
 "Architectural workshops affirm assignments which have not yet been set during the programme. The suggested assignments of the workshops assume and combine complex architectural systems and assemblies; multiple uses, events and meanings, dependency on the urban context and other spatial contexts."

Within Workshop 3 various professors mentor various projects, some of them presented here:
 Typological studies of architectural plans
 Typological boundaries of 4* city hotels (2014_2015)

 Trends in development of architectural programs depend in part on specific phenomenon of globalization, work environment that is profiled between real and virtually branded environment, introduction of (virtual) entertainment in areas of free and working time, understanding the scientific paradigm of the world, analog - digital position in architecture and implementation of optimal versus appropriate sustainable (energy) solutions in the fields of architectural construction (Cost Effective Design through a Life Cycle Costing – LCC). Looking together, in synergetic value of mutual influence, the architectonic realities of the information age are formulated. In this context, typology studies of architectural plans and their multifunctional components become the basis for a broader understanding of the architectural composition. Workshop research method integrates interdisciplinary relations in the field of science, art and technology into the body of architectural design. (prof.dr. Homadovski)

City hotel 4* and complementary programs on sites proposed by Workshop leaders.

"Architectural Workshops affirm the tasks that have not yet been placed in the educational process of undergraduate or graduate studies. Professors - workshop leaders - propose tasks and coordinate them at the joint meeting. The proposed tasks of architectural workshop should assume and consolidate complex architectural systems and assemblies; multiplicity of use, events and meanings, dependence of urban or other spatial context. Students investigate and establish a reference frame of problems and formulate theoretical estimations. Presented design at the end of the semester is a concrete, clear concept, drawn in an appropriate scale with all the elements of architecture." (Prof. Geng)

...
 Studies of new and/or rare architectural types and their functional components were set up as the basis for a broader understanding of the architectural composition and typology. Understanding the architectural holdings of modern and contemporary world architecture. Understanding architecture in the phenomenon of environmental sustainability at the turn of the 3rd millennium.

4-star city hotel and complementary programmes on locations suggested by the mentor: "Typological studies of architectural plans □ typological limits for 4-star city hotels* (2015)", "Hotel Plus/Heritage Hotel", "Refugees_Temporary hotel for refugees"; "Straddle structures", "Architectural topography of identity_urbs et rurs".

...
 With the Museum for Monuments of Totalitarian Regimes, missing places are formed in transitive memory symbols of previous ideologies, a places that connects political and cultural past, present and possible future ▪ Glass palace - Orangerie - Palmen Garten, location of a new Botanical Garden in Zagreb revalue dialogue with representative palaces of the city framed by Lenuzzi horseshoe composition ▪ Culture Forums on the urban-generative locations ▪ Zagreb Forum Buzin contains theme parks as a corporate communication platforms; eco park, techno park, car park, science park ▪ V. Holjevca Ave. location in Zagreb with the Museum of Contemporary Art contains a range of spatial and programming environments; Visionarijum - Educatorijum as a museum, a park and a media lab. center - promoting natural, scientific and technical activities. ▪ Typology borders of 4* City Hotels in Zagreb locations.

4-star city hotel and complementary programmes on locations suggested by the mentor: "Typological studies of architectural plans □ typological limits for 4-star city hotels* (2015)", "Hotel Plus/Heritage Hotel", "Refugees_Temporary hotel for refugees"; "Straddle structures", "Architectural topography of identity_urbs et rurs".

....

Regular attendance, fieldwork, project supervised by a mentor, project presentation

Compulsory Reading
 Current professional reviews in the field of architecture and urban planning (periodicals and monographs)
 ...
 Additional Reading
 1. Reading items listed for the courses which cover workshop-related topics

The student who successfully completes the course will be able to:
 - Research the chosen topic.
 - Critically assess the values of researched parameters.
 - Complete a highly complex course assignment on a set topic.
 - Support the development of an architectural project with research conclusions.
 - Independently create an integral urban and architectural design supported by the conducted research.

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

...

Course Objective

Application of sustainable and/or appropriate energy approaches in the field of architectural design and construction. Getting to know the integration processes between technological-technical and artistic achievements of architectural creation.

Publication of professional papers, scientific research and theoretical work in order to contribute to the scientific field under the mentorship of lecturer. Encouraging the interest for technical and engineering dimensions of architectural creativity in balance with the cultural and artistic dimensions of architecture.

Development of generic skills; cooperative strategies and activities, formation and operation within the team-building environment, modeling ad-hoc skills in information processing and formulation of knowledge. Development of skills and understanding of media presentation standards.

..

Course Syllabus

...

Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

*** Course Objective

Course Syllabus

*** Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

192517

Workshop 3: Landscape Architecture

Radionica 3: Pejzažna arhitektura

Assist. Prof. Marko Rukavina, Ph.D.

Winter - III semester – Compulsory course

Language of instruction : **Croatian**

Other languages for consultative teaching : **English / Italian / German / French**

150 studio/sem

14.0 ECTS

Contact:

Assist. Prof. Marko Rukavina,
Ph.D.

marko.rukavina@arhitekt.hr

office no.: 109 / 1. floor

URBANSCAPE EMANATION _ SPACE VS. –SCAPE. Space is the boundless. -scape a specified scene. Un-volumetric architecture. Rediscovery of Space _ Impressions, Modifications of Consciousness /A Search for the Meaning of Time and Structures in the Space. Practice is 'knowing how to do something; theory is knowing why.' Garrett Eckbo. Emanation - the effect that any entity, system, and/or being has on its environment. Walking choreographies, visual illusions and emotional landscapes of waiting. Emanation - emission: the act of emitting; causing to flow forth. "OUR EPOCH [AS] ONE IN WHICH SPACE TAKES FOR US THE FORM OF RELATIONS AMONG SITES" MICHEL FOUCAULT . What then is time? If no one asks me, I know; if I want to explain it to a questioner, I do not know... We measures times. But how we measure what does not exist? The past is no longer, the future is not yet. And what of the present? The present has not duration... In order that we may compare a short and a long syllable, both must have died away. Thus I do not measure the syllables themselves, but the images of the two tones in my memory... Thus when I measure time, I measure impressions, modifications of consciousness. (Saint Augustin).

...
The objective is to create a paradigm that is independent of the location, nature, scale, time and technology. This paper presents a network of key terms and concepts taking into account the location, context and program. Integrating the classification, structure and analysis, and promoting discussion. Way of designing is transforming the choreography of movement, of visual illusions and of sensory landscapes.

ACHIEVING the completeness of a space and respecting the existing space. Create an image of a space. Discover analysing how a space can be changed in relation to time: WHAT WAS IT? WHAT COULD IT BE? CONTENT FRAMEWORKS AND SPACE ELEMENTS natural and cultural determinants. Elements which encourage INTERACTION: causes_effects_time. FUNCTION as space dynamics. Types of movement. STRUCTURE is made of structural elements: points (distinguishing features), lines (corridors), areas, nodes, edges, matrices. Introduction to ISOVIST, connecting spatial behaviour and experience and the constructed project.

Other Teaching Methods and Assessment Strategies
Presentation, poster and booklet.

Compulsory Reading
A SELECTION based on the chosen assignment
....

1. Contemporary examples from academic publications and periodicals (a wider selection of reading items will be offered by the coordinator upon choosing the assignment (approximately 5 items per assignment)).
2. A compilation of articles which will be made by the student, with the help of the professor, upon choosing the assignment.

On successful completion of the course, the student will be able to:

1. Apply the methods of urban planning and landscape architecture and other methods of spatial analysis in the context of landscape development and changes.
2. Apply the knowledge of the researched landscape.
3. Present the analysis of spatial development and changes of researched landscape.
4. Identify space identity factors and landscape types important for setting the criteria for contemporary interventions taking into consideration the historical and physical/existing context planned in the physical planning documentation.
5. Evaluate the researched landscape within and/or outside a settlement in order to preserve recognisable values and set the criteria for potential contemporary interventions.
6. Design an integrated spatial/urban landscape design proposal for contemporary interventions on land within or outside a settlement.

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

Course Objective

Course Syllabus

Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

192517

Workshop 3: Physical Planning / Radionica 3: Prostorno planiranje/

Assoc. Prof. Lea Petrović Krajnik, Ph.D

Winter - III semester – Compulsory course

Language of instruction : **Croatian**

Other languages for consultative teaching : **English / Italian**

150 studio/sem

14.0 ECTS

Contact:

Assoc. Prof. Lea Petrović
 Krajnik, Ph.D
lea.petrovic@arhitekt.hr
 office no.: 108 / 1. floor

Policies and perspectives of development – the Mediterranean context of the use and protection of the coastal area – subject review
 Exploration and assessment of space potential – SWAT analysis of space changes – identity, “brand”, spatial conditions, planning principles ... the concept of transformation of a part of the coastal area.
 Presentation of the project through stages, public exhibition

...
 The assignment aims to explore and suggest possible courses of development of a selected coastal area.
 The proposed solution encompasses check-up and setting up the requirements for the development of a wider area as well as a detailed program of the selected sites with emphasis on space design and preservation of ambient values.

Overview of selected coastal development and utilisation proposals and designs □ research paper (seminar). SWAT analysis of spatial development of the Adriatic or continental coastal area.
 Programme proposal and conceptual physical design of the development of a part of a coastal area.
 The paper and the selection of the research area is individual, with weekly presentations of previously submitted research results.

1. SEMINAR PAPER
 - Introduction to the methods for determining spatial indicators for planning of the chosen topic.
 (prepared in the form of an overview paper; the best papers will be recommended for publishing in a scientific journal and will be the candidates for the Dean’s Award)
2. SPATIAL DESIGN
 - Comparative analysis of tourist areas in county physical plans (position, type, typology, development programme, brand, identity)
 - Excerpt from the municipality physical development plan/urban development plan
3. Problem chart □ Purpose, circulation, landscape, obligatory programme indicators
4. Concept of spatial/urban design (if necessary □ supplement to the municipality physical development plan) and urban development plan programme
5. Spatial concept (variants), structure, 3D model (1:2,000)
6. Presentation and public exhibition of submission

Other Teaching Methods and Assessment Strategies
 Attendance of lectures, seminar papers, drafting and presentation of a physical planning proposal

Compulsory Reading
 Marinović-Uzelac, A. (2001): Prostorno planiranje, Dom i svijet, Zagreb, ISBN 410511020
 Pegan, S (2010): Prostorno planiranje II - zaštita prirode i okoliša - compendium predavanja, SZ, AF
 Pegan, S. (2011): Prostorno planiranje I - compendium predavanja, SZ, AF

Additional Reading
 1. Barbieri, P. (ed.) (2009): Hyper Adriatica, LiSt, Barcelona, ISBN-978-88-95623-19-1
 2. Graaf, J. at al. (ed.): Europe: Coast Wise, 010 publishers, Rotterdam, 1997
 3. MVRDV: The Regionmaker RheinRuhrCity, ISBN 3-7757-1200-3
 4. Pogačnik, A. (2004): Kako izdelamo prostorske načrte, Maribor, ISBN 961-230-288-X
 5. SPURH (2009): Kriteriji za planiranje turističkih predjela obalnog područja mora, MZOPUG, Zagreb
 6. SPURH (2010): Smjernice i kriteriji za planiranje golfskih igrališta, Zagreb,
 7. Jenks, M. & Burton, E., Williams, K. (1996) The Compact City, a Sustainable Urban Form?, Oxford: Spon Press, ISBN 0-419- 21300-7
 8. *** MZOPUG (2009): Strategija održivog razvitka Republike Hrvatske, Official Gazette 30/09
 9. *** MZOPUG: Program prostornog uređenja Republike Hrvatske, Zagreb, ISBN 953- 97403-1-2
 10. *** MZOPUG (2011): Smjernice i kriteriji za arhitektonsku vrsnoću građenja, Zagreb

On successful completion of the course, the student will be able to:
 - Apply the knowledge of physical planning in a physical planning design.
 - Create a physical planning design based on the assessment of research results.
 - Explain the physical planning design proposal and create a plan and programme for its realisation.
 - Evaluate alternative proposals for the physical planning design.

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

*** Course Objective

Course Syllabus

*** Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

192517

Workshop 3: Urban Planning

/

Radionica 3: Urbanizam

Prof. Krunoslav Šmit, Ph.D.

Winter - III semester –
 Compulsory course

Language of instruction : Croatian

Other languages for consultative
 teaching: English / Italian

150 studio/sem

14.0 ECTS

A good layout is the basis of all satisfactory urban development, and can only be achieved when the plan derives its inspiration from the site and when the three-dimensional aspect of design is properly studied. The successful urban design proposal depends upon the relationship of the building masses to each other, to the street and space about them, to the land use and their proper setting in the urban landscape. Physical signs of new activities in towns will appear in a realization that riverfronts, coast-fronts and other areas within the city, representing an opportunity for stunning rehabilitation. Downtown should be planned for people and not for cars. Development planning should concentrate on the quality of life and not on the growth as a goal. Urban clusters should be tight, integrated with transit, and designed for pedestrians and should contain a variety of spaces and activities. The available capacity of downtown should be renewed. Downtown will increasingly attract residents and investment.

...
 Understanding of urban problems. Master the big urban scale. Principles of urban composition. Management of urban spaces. Examine procedure in urban planning.

1 to 6 Introducing the assignment, choosing the methodology, getting familiar with the project site and urban or physical planning problem, inspecting the site, analysing the existing urban planning or physical planning documentation; 7 to 12 Drafting a problem chart, drafting a preliminary concept, discussion, designing a detailed urban plan, urban or physical development plan; 13 to 15 Introduction to design techniques. Developing a project and drafting the assignment.

—
 Other Teaching Methods and Assessment Strategies
 Required level of knowledge is achieved through seminar papers, critical discussions with visiting experts and through topical lectures

....

Attendance of lectures, seminar papers, drafting and presentation of an urban planning proposal.

Compulsory Reading

1. Contemporary examples from academic publications and periodicals (a wider selection of reading items will be offered by the coordinator upon choosing the assignment (approximately 5 items per assignment)).
 2. Contemporary examples from academic publications and periodicals (a wider selection of reading items will be offered by the tutor upon choosing the assignment (approximately 10 items per assignment)).

Additional Reading

1. International examples of similar solutions
 2. Croatian examples of similar solutions

On successful completion of the course, the student will be able to:

- Interpret physical planning concepts through urban design.
- Create an urban design based on the results of research.
- Explain urban design proposal and create a plan and programme of realisation.
- Evaluate alternative urban design proposals.

Contact:
 Prof. Krunoslav Šmit, Ph.D.
krunoslav.smit@arhitekt.hr
 office no.: 110/ I. floor

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

*** Course Objective

For international students, the language of instruction is English. For students studying at the Faculty of Architecture, it is English or Croatian, depending on their individual preferences.

Female architects worldwide have been more active since the beginning of the 20th century, which marks the beginning and the development of modern architecture. In international contexts, the pace at which female architects were winning recognition varied. The course will explore various beginnings, limits, and activity of female architects of the 20th and 21st centuries, as well as their road to receiving recognition for their creative potential.

Introductory lectures will cover specific topics and will focus on the work of female architects, i.e. women from different points of view. The research is in accordance with the tenets of the New European Bauhaus, which contribute more specifically to the positive experiences in our everyday lives, and a fairer way of life in creative and inclusive societies through architecture, design and art.

According to their preferences, students select female architects whose works or activity inspires and intrigues them. They explore various professional aspects of their activity in the context of different generations or socio-political situations. The scale of the female architects' activity stretches from architecture, urban planning and interior decoration up to spatial planning, monument protection, administrative tasks, photography. .. By researching primary archives, professional literature, databases, and the internet, as well as by doing on-site research and interviews, students analyse and evaluate the female architects' complete works, and highlight the most important architectural and other professional or scientific works of those female architects. Interviews with female architects are also encouraged.

 The goal is to explore the contribution of female architects of the 20th and 21st centuries as authors and to recognise their work in the context of modern and contemporary architecture. The aim is to explore social, legal and economic aspects of particular environments and empower young women through these experiences.

By comparative analysis and the presentation of students' research, the aspects of female architects' activity in the international context (the EU and beyond) will be presented, and the experiences and knowledge needed for the recognition of the professional activity of young female architects of the 21st century will be identified.

Course Syllabus

*** Methods and criteria of evaluation

1. Course introduction.
 Presentation of students and international starting points.
 Individual research proposals based on personal affinities and the knowledge of female architects' works.
2. Introductory lecture by prof. Zrinka Barišić Marenčić, PhD: Contribution to Research of Architecture and Education in Croatia with the Focus at Women Architects (since 1919)
 Analysis of individual research proposals based on personal affinities and the knowledge of female architects' works.
3. Analysis of researched materials and works.
 Analysis of the most important works and methods of research of historical and contemporary works.
4. Founding of foreign schools of architecture and analysis of first female architects' activity.
 Analysis of works and discussion.
5. Presentation of the first phase of research. Evaluation and discussion.
6. Lecture by prof. Zrinka Barišić Marenčić, PhD: Architect Zoja Dumengjić : The Remarkable Features of Her Oeuvre in the Context of Croatian Modern Architecture.
 Analysis of the works and discussion.
7. International discourse and comparative analysis of specific features.
8. Analysis of generational aspects of activity during the 20th and 21st century.
9. Presentation of the second phase of research. Evaluation and discussion.
10. The work of female architects in the context of prominent figures from their era.
11. Typology of works and analysis of specific features.
12. Analysis of contemporary progress of female architects in international terms.
13. Presentation of the third phase of research. Evaluation and discussion.
 Submission of posters for display, evaluation, discussion.
14. Final presentation and conclusions.
15. Submission of the final seminar paper and discussion.

...
 Other Teaching Methods and Assessment Strategies
 The required level of knowledge is achieved through seminar papers, posters, critical discussions and through topic-based lectures.

Attendance of lectures, seminar papers, drafting, posters and final oral presentation.

Compulsory and Additional Reading

Compulsory Reading

1. Women's Creativity since the Modern Movement (1918-2018): Toward a New Perception and Reception / Seražin, Helena ; Franchini, Caterina; Garda, Emilia (eds.). Ljubljana: France Stele Institute of Art History ZRC SAZU, ZRC Publishing House, 2018.
2. Harriet Harriss, Naomi House, Monika Parrinder, and Tom Ravenscroft : 100 Women-Architects in Practice, RIBA Publishing, 2024
3. Sekulić-Gvozdanović, Sena: Žena u arhitekturi : tragom žene kreatora i žene teoretičara u povijesti arhitekture ; predgovor Olga Maruševski ; post scriptum Itsuko Hasegawa. Zagreb : Nakladništvo Udruženja hrvatskih arhitekata, 1998.
4. Barišić Marenčić, Zrinka: Arhitektica Zoja Dumengjić. Zagreb: Arhitektonski fakultet Sveučilišta u Zagrebu i UPI 2M PLUS, 2020..

Additional Reading

1. Kenneth Frampton, Moderna arhitektura: kritička povijest, Zagreb, Globus, 1992.

Course Learning Outcomes

On successful completion of the course, the student will be able to:

- Analyse architectural project and realization
- Evaluate specific creative contribution.
- Contextualize the architect's work.
- Interpret analytically, textually, orally and visually the most significant architectural contribution of the analysed architectural work.
- Understand the specific social context of the work of female architects in various contexts.
- Gain sensibility for the specific aspects of the professional work and private aspects of the life of women.

Learning outcomes:

An ability to creatively connect knowledge and methods from the fields of technical sciences and arts, as well as social and natural sciences, into the process of researching, designing, and implementing architectural and urban designs which meet the aesthetic and technical requirements of the discipline. An ability to interpret theoretical concepts that use universal principles to argue contemporary design decisions An ability to plan further education by enrolling in postgraduate scientific and artistic studies in architecture and urbanism An ability to plan and develop personal competencies by following the latest developments in the field and by participating in available professional development programs in the field of architecture

The final outcome is the empowerment of young women to be able to work and gain recognition in the 21st century by gaining the experience and the specific know-how of the previous generations of female architects.

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

*** Course Objective

Course Syllabus

*** Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

79196

English for Architecture 4

/
Engleski jezik za arhitekturu IV

Senior lecturer Neda Borić,
Ph.D.

Winter – Optional course

English

15 lectures/sem

1.0 ECTS

Contact:

Senior lecturer Neda Borić,
Ph.D.

nboric@arhitekt.hr

office no.: 306 / 3rd floor

The course focuses on the acquisition of specialist terminology, developing reading skills, improving general English vocabulary, improving oral communication skill, presentation skills, business communication skills (employment). Course materials are based on a selection of authentic texts from various sources with architecture and urban planning-based topics.

Topics: redevelopment and renovation projects, famous architects, sustainable human settlements, architecture for the 21st century, business communication (employment)

...

Students are expected to develop their written and oral competence in English for architecture purposes in order to be able to meet the requirements of their academic education and future professional work. Knowledge and skills acquired should help them in their future professional careers as well as to integrate more successfully into the international business, professional and scientific community within the architectural profession.

Knowledge and skills: Developing oral and written communication competence, developing reading skills, presentation skills, improving the knowledge of specialist and general English vocabulary, business communication skills for employment purposes.

Course syllabus

1. INTRODUCTION – Course content, instructions
2. REDEVELOPMENT AND RENOVATION, Part I (lexical groups, gerund / infinitive)
3. REDEVELOPMENT AND RENOVATION, Part II (phrasal verbs, translation exercises, group discussion, additional reading assignments)
4. TADAO ANDO (part I) (text functions, text cohesion – purpose connectors, translation exercises, additional reading assignments)
5. TADAO ANDO (part II)
6. SUSTAINABLE HUMAN SETTLEMENTS – Planning Neighbourhoods
7. SUSTAINABLE HUMAN SETTLEMENTS, Case Study (independent group work on projects that students choose according to their interest and on related planned exercises)
8. ARCHITECTURE FOR THE 21st CENTURY – Case Study (part I)(independent group work on projects that students choose according to their interest and on related planned exercises)
9. ARCHITECTURE FOR THE 21st CENTURY (part II)
10. GETTING A JOB (part I) (job advertisements, job application, CV, job interview, job offer, employment contract)
11. GETTING A JOB (part II)

The remaining classes will cover the topics listed above flexibly, depending on their scope and complexity. They will also cover the oral presentations of specialist topics which students chose according to their own interests. The course requires considerable independent work.

Other Teaching Methods and Assessment Strategies:

- Seminar paper on a chosen topic and oral presentation of the topic
- Regular attendance

Compulsory Reading

- University textbook:

Borić, N. (2007). English for Architecture and Urban Planning.

Golden marketing, Tehnička knjiga. Zagreb

- General and specialized dictionaries

Additional Reading – Texts from various sources

1 The student will be able to read all specialist texts in English and understand and reinterpret them on their own, both during their academic education and in their work.

2 The student will be able to use specialist terminology appropriately, in speech and writing.

3 The student will be able to analyze any complex specialist topic and write about it in English. They will also be able to express their opinions supported by valid arguments.

4 The student will be able to independently hold a presentation of complex aspects of specialist topics.

5 The student will be able to participate in complex critical discussions.

6 The student will know what to do in a professional environment (employment: understand job advertisements, write an application and a CV, understand an employment contract, successfully present themselves and their competencies in a job interview etc.).

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

*** Course Objective

The course deals with industrial heritage (factories and industrial ares) and technical monuments in wider sense (railway stations, markets, etc) with the purpose of establishing this category of architectural heritage in the context of social and technical history as well as in the architectural and urban planning context. The regeneration and re-use of the wider category of technical monuments heritage is dealt with in the greatest part of lectures.

...
Acquaintance with worldwide and Croatian industrial heritage, and the examples of re-use of industrial heritage as a basis for working on re-use projects for these buildings.

81949

Industrial Archaeology
/
Industrijska arheologija

Prof. Zrinka Barišić Marenić,
Ph.D.

Winter – Optional course

Language of instruction : **Croatian**

Other languages for consultative
teaching: **English / German**

15 lectures/sem

1.0 ECTS

Contact:
Assoc. Prof. Zrinka Barišić
Marenić, Ph.D.
zrinka.barisic@arhitekt.hr
office no.: 203 / 2nd floor

Course Syllabus

*** Methods and criteria of evaluation

1. Industrial heritage, organization of the subject, its definition and methodology. Affirmation of interdisciplinary approach. 2. Historical framework. Historical development of industrialization in the world with special reference to Great Britain as the home country of the First Industrial Revolution. 3. Historical outline of the development of industry in Croatia. Reasons for its late appearance and introduction of only particular types of industry. 4. Technical culture buildings. Definition and the subject scope. Problems linked to location, spatial and structural principles. Evaluation. 5. Industrial heritage worldwide. Representative examples of technical monuments, their conservation and presentation. 6. Industrial heritage in Croatia. Representative examples (Zagreb, Rijeka, Rovinj, Osijek, Karlovac, Zadar, Split ...). 7. Regeneration and re-use of industrial heritage. Aims and principles of re-use, its methodology, socio-economic aspects and re-use selection criteria. 8. A historical outline of industrial heritage re-use. World (St. Catherine Docks, London; Cannery, San Francisco...) and Croatian re-use examples (Gliptoteka, Zagreb). 9. Regeneration of industrial zones. Industrial- archaeological parks. 10. Re-use of industrial heritage for housing purposes. Analysis and critical review of representative examples. 11. Re-use of industrial heritage for commercial purposes. Analysis and critical review of representative examples. 12. Re-use of industrial heritage for mixed purposes. 13. Re-use of industrial heritage for cultural purposes. Analysis and critical review of representative examples. 14. Re-use of industrial heritage for museums and galleries. Analysis and critical review of representative examples. 15. Bright future? Prospects.

...

Seminar work and oral .ppt presentation of the selected theme.

Compulsory and Additional Reading

Compulsory Reading:

1. Meurs, P.; Steenhuis, M.: Reuse, Redevelop and Design: How the Dutch Deal with Heritage, nai010 publishers in association with Cultural Heritage Agency, NL, Rotterdam, 2017
2. Stratton, M.: Industrial Buildings Conservation and Regeneration, E&FN Soon, 2000. E&FN Soon, 2000
3. *** Grad za 21. stoljeće, zbornik radova prvog hrvatskog simpozija o industrijskom naslijeđu, Karlovac, 2000.

Additional Reading

1. Binney, M.; Machin, F.; Powell, K.: Bright Future, The Re-use of Industrial buildings, SAVE Britain's Heritage, 1990.
2. related papers published within: I., II., III., IV., V. međunarodna konferencija o industrijskoj baštini PRO TORPEDO, Rijeka, 2005. – 2012.

Course Learning Outcomes

On successful completion of the course, the student will be able to:

1. Critically assess the industrial built heritage and built heritage associated with technical and infrastructural achievements.
2. Evaluate the significance of individual designs.
3. Assess the spatial, construction and urban planning potential of industrial heritage.
4. Explain the necessity for restoration.
5. Interpret the quality of reference architectural and urban planning restoration work.
6. Suggest regeneration, or bottom-up interventions, artistic actions, temporary use etc., depending on the needs of the local community.
7. Integrate acquired knowledge as the basis of a restoration project.
8. Plan the restoration of abandoned industrial heritage, especially the most threatened sites.
9. Categorize industrial heritage according to significance, level of threat and restoration priority.
10. Write a conclusion for a research paper on industrial built heritage and built heritage associated with technical achievements.

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

... Course Objective

The relationship between tradition and modernity in architecture, as a fundamental topic of the summer school program, is analyzed through evaluation of local architectural achievements. Trips to interesting and valuable historical and architectural sites are organized by the School: Blaca, Škrip and the island of Hvar (Vrboska, Starigrad, Hvar). Visiting lecturers take part in the summer school work giving lectures in architecture, art history, history, archaeology etc. The School's objective is to work out detailed analyses of the existing ambiances and put forward proposals for possible revitalization of structures in historic ambiances as well as intervention in the existing historic nuclei in view of adapting to modern requirements yet respecting the built heritage.

...
Developing ability to create space and tourist facilities in a responsible way. The role of architects in planning, design and implementation.

Course Syllabus

... Methods and criteria of evaluation

Ambientura Summer School covers topics, methods and tasks related to urban planning and architecture through identification, analysis and valorization of space and programming, creation, presentation and explanation of the urban planning and architectural concept and design.

Compulsory and Additional Reading

... Methods and criteria of evaluation

Compulsory Reading
1. Vukić, F. (2013), Grad kao identitetski sustav: Prema metodi sustavnog projektiranja identiteta, Sveučilište u Zagrebu, Arhitektonski fakultet, Studij dizajna, Zagreb
2. Pegan, S. (2007), Urbanizam – Uvod u detaljno urbanističko planiranje, Arhitektonski fakultet Sveučilišta u Zagrebu, Acta architectonica – Udžbenici i priručnici 5, Zagreb
3. Hrzić, M. (1988), Percepcijski pristup oblikovanju grada u okviru procesa planiranja, disertacija, Sveučilište u Zagrebu, Arhitektonski fakultet, Zagreb
4. Lynch, K. (1974), Slika jednog grada, Građevinska knjiga, Beograd
5. Grgurević, O. (1994), Od pojma slike grada do pojma opće slike krajolika, Prostor 2, 1 (3-4): 285290, Zagreb

Additional reading will be decided upon depending on the chosen Ambientura Summer School site.

Course Learning Outcomes

... Methods and criteria of evaluation

- Analyze spatial features – identify examples of good practice – creatively apply theoretical and practical knowledge about space – identify, analyze, evaluate, program, create, present and explain an urban planning and architectural concept and design of a space – participate in research and project teams.

162996

**Summer School Ambientura /
Ljetna škola Ambientura**

**Associate Prof. Ivan Mlinar,
Ph.D.**

Winter – Optional course

Language of instruction : Croatian

**Other languages for consultative
teaching : English**

**15 lectures/sem
Summer school at the island
of Brač**

In order to attend course in August, please do contact professor at imlinar@arhitekt.hr, immediately after selection of course

1.0 ECTS

Contact:
Associate Prof. Ivan Mlinar,
Ph.D.
ivan.mlinar@arhitekt.hr
office no.: 109 / 1. floor

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

*** Course Objective

189219
Contemporary Landscape Architecture
/
Suvremena perivojna arhitektura

Assist. Prof. Tamara Zaninović, Ph.D.

Winter – Optional course

Croatian / English / Italian / German / French

15 lectures/sem

1.0 ECTS

A subject of growing interest globally, landscape urbanism is seen as a way to reimagine large cities and aging infrastructures. Landscape urbanism emphasizes the integration of natural, structural, cultural and infrastructural layers of urban space, and suggests a reexamination of current planning models.

...
The course gives students an insight into the contemporary landscape architecture as an indivisible part of urban planning and architectural design. Through analysis, examples and work on seminar introduces students to the relevant sources and recent examples of landscape architecture. The knowledge gained in this course apply to projects that are made in urban, landscape and architectural workshops.

Contact:
Assist. Prof. Tamara Zaninović,
Ph.D.
tmaric@arhitekt.hr
office no.: 109 / I. floor

Course Syllabus

*** Methods and criteria of evaluation

First step of attractiveness Seeing the void _introduction_ contemplating The second step of attractiveness Multisensory experience – synaesthesia: see sound,hear light,touch smell,lick a void and swallow air Context_Concept_Idea Next to ideas and inspiration the site conditions and constraints stand at the beginning of each project. They form the basis for landscape architects and designers to develop convincing concepts, which are Manifested in formal, spatial structures. Open space is always in-between. Between North and South, today and tomorrow, function and shape. Each design for the urban space and landscape has to deal with the site`s specific character, has to Envision Future Space. Deriving from this new paradigm and a local identity is being defined during the design process. The design is developed within a spatial, material and chronological context. Water_canal and river Water_lake and sea Waterscapes are constructed water features in urban public plazas and parks designed to harness both the hydrologic cycle and the aesthetic qualities of water. They celebrate the role of water in our urban landscapes and allow people to experience the qualities of water through touch, sight and sound. Landscape architecture of the city_re-interpretation of the park Pattern, and relationship, proportion, identity, exchange. The area generally unlimited - limited Space through the dimension sizes, distances, intervals, layers Space through the amorphous form, symmetrical, open, closed Space through moving passage, crossing, speed, direction, way Shaping the idea of space: idea, concept, theory, mental image, imagination - the flow of ideas, the discovery Elements of thinking about space and no_ facts, features and no_, security seals and no_identification, associative elements Ways of thinking about space: reasonable, intuitive, speculative, documentary, negating Results of thinking about space conclusion_conviction, the presumption _attitude, finding _creativity, knowledge_ implementation Contemporary re-interpretation_pavilion _light, sound Pavilions,_small structure, showing the unity of places and events. These structures reveal the attraction, creating atmosphere and transform the light giving the space a character that did not previously have. Tradition transformed into modernity not only content and form, but also design and usability is summed up in a small structure _ pavilion. The rhetoric of contemporary urban landscape The growth of cities: landscape architecture replenishment of cities_planning Although finding a common interest in the landscape, artists, writers, designers, architects and geographers can not accept the common definition, nor agree on its place in the research. Landscape is used differently, but it serves everyone. Landscape Urbanism wants to find out what is happening in the urban landscape. Landscape Urbanism is a concept design and planning in the urban landscape. Spaces_reshaping urban landscape architecture Artform - transform the interest focuses on the deserted area, the obsolete and unproductive spaces and buildings, often undefined and without limits, the place to which the French expression; terrain vague_void, unclear, without content. Areas_ urban landscape design Bridging the Gap Void_emptiness_nonexistence, the lacking of physical and mental content Phenomenological gap can be defined as a place that is charact. by its context and history, which is now outside of urban functions, growth and transformation (such as natural disasters, wars, etc.). Phenomenological gap is an individual event in the city, it builds itself. Functional changes _ altered ways of using the city. Understanding the gap, not only in terms of materiality, but also the location and history are necessary when trying to (re) integration of this type of

Compulsory and Additional Reading

Compulsory Reading
1. Girot., Christophe (2016) The Course of Landscape Architecture, Thames&Hudson
2. Hunt, John Dixon (2000) Greater Perfections: The Practice of Garden Theory, Philadelphia: University of Pennsylvania Press
3. Spiri, Anne Whiston (1998) The language of landscape, London: Yale University Press

Additional Reading
<https://dirt.asla.org/>
<http://www.landezine.com/>
<https://www.toposmagazine.com/>

Course Learning Outcomes

1. D1 – Creatively incorporate knowledge and methods of technical arts and sciences and social and natural sciences into the process of research, design and construction of an architectural and urban design which meets esthetic and technical requirements of the discipline.
2. D6 – Interpret theoretical concepts which offer universal principles as arguments for contemporary design decisions.
3. D15 – Plan and develop personal competencies by keeping up to date with architectural achievements and by participating in available architectural training programs.
4. Critically assess contemporary landscape architecture projects.
5. Organize knowledge on contemporary landscape architecture.
6. Interpret the characteristics and factors of contemporary landscape architecture identity.
7. Choose the criteria for contemporary landscape architecture designs.
8. Connect the acquired knowledge on contemporary landscape architecture with the design of a landscape, urban and architectural project and/or plan.

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

...
Course Objective

Course Syllabus

...
Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

functionality gaps in the urban space. Physical geographic features such as mountains, rivers and valleys are generated void in the urban space. City areas_movement and connectivity – promenade, avenue, pedestrian streets, bridges Walkspace_ we move through the space: walkscape_we look at the space City areas_adaptive reuse projects_new use After the abandonment of the facilities, the unique park-like setting offers an historic opportunity for the city. Open spaces and cultural events are an important early catalyst in bringing the city back to life. But the long-term vision is to create an outstanding park for the 21st c. Attractions and bizarre / awards Focus on the tension between the temporary and the permanent, between planned and experiential. Periodically review the relationship between the attempts to create order in the city through long-term plans and the everyday chaos that is the product of that process. The goal is to encourage spaces and situations that function within the state of temporality, space and draw energy from its flexibility.

....

Requirements
Regular attendance and submission of seminar synopsis
Exam
Seminar paper and oral exam

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

*** Course Objective

189210

Project Domain
/
Granice projekta

**Assist.Prof. Krunoslav
Ivanišin, Ph.D.**

Winter – Optional course

Language of instruction : English

15 lectures/sem

1.0 ECTS

Contact:

Assist. Prof. Krunoslav Ivanišin,
Ph.D.

kivanisin@arhitekt.hr
office no.: 205 / II. floor

The way of looking, the way of drawing, and the way of building are causally related. PROJECT DOMAIN is drawn with a sequence of (often unnecessarily incomprehensible) notions, paradigms and epistemologies surrounding the architectural practice and the discourse on architecture. Instead of imposing ready-made design schemes, the intention of this course is to proof logically the existence of the substantial and multidirectional relation: TEXT – IMAGE – PROJECT, through the proposed sequence of diachronically contextualized readings: from the tractates and essays on architecture, architectural travelogues, and exemplary critics of architectural projects, to the excerpts from philosophical treatises, literary writings, or scientific papers directly or indirectly related to architecture.

The introductory definition of basic notions around the project, including the project itself, is followed by the elaborate discussion of the relation between nature and architecture in the context of the fundamental ontologies about the purpose of humans in this world. Those relations are architecturally expressed in various notions of place, space and non-place, in the actual facts of horizon and vertical axis, and in the phenomena of natural and artificial growth, and gravitation. The subsequent discussion about the picturesque and the sublime, their origins and their applicability in the architectural practice and the discourse on architecture, leads to the hierarchically substantiated system of specifically architectural perspective on things, dependent on the natural order and the level of the technological sophistication: from the levelled view, the upwards view and the appropriation of the horizon, to the elevated, disinterested view from above, which expands the domain of architecture, from the object scale in the immediate physical context onto the geographic scales of landform and landscape. The logical arguments about the autonomy and about the essential materiality of architecture are derived in the conclusion, following the same scale sequence.

Students are expected to possess a certain experience in architectural practice, at least basic knowledge of history and theory of architecture, and normal ambition to critically reflect upon their future profession. The lectures and seminars are in English. Students are required to read at least two out of the proposed short texts per lecture. Those hardly accessible will be issued as a script.

...
While delimiting the notions around the architectural project, the aim of the lectures and the parallel seminar is to teach the students how to reflect critically upon those notions and, notwithstanding the evanescent meanings and the associated concepts, how to understand and logically argument their own and other projects in pictorial and verbal ways. While attending the lectures, contributing to the discussions, and analysing and presenting the referential project, the student will start to develop his/ her own catalogue of epistemologies and paradigms, eventually useful in his/ her architectural practice. The knowledge acquired with this course will

Course Syllabus

*** Methods and criteria of evaluation

Syllabus

1. INTRODUCTION

Way of looking, way of drawing, way of building. Idea about the world, idea about architecture. Rational and pseudo-rational (logical and pseudo-logical) reasons and arguments. Propositions and concepts. Verbal and non-verbal thinking; (digital) description and (mental) model. PROJECT; preliminary definition.

2. Seminar I: Catalogues, paradigms, epistemologies. Selection of the referential project for each student to analyze during the semester and represent pictorially and verbally at the end of the course.

3. ELEMENTS: ARCHITECTURE AND NATURE Natural elements, ELEMENTS OF ARCHITECTURE. Natural growth, gravity, Newtonian natural science. Architecture and nature, architecture and technology. The unstable balance. HEARTH. AEDES.

Vitruvius: Second Book; Gottfried Semper: Die vier Elemente der Baukunst (excerpt); Reyner Banham: An Ecology for Architecture; Iñaki Abalos: Thermodynamic Beauty; Krunoslav Ivanišin: Beginnings

4. FORM: PRESENCE AND SUBSTANCE Classical philosophy: the visible world and the world of forms. Monotheistic idea about the universe: natural materialism, limits of human perception. The fifth element. SPACE. Alberti. PERSPECTIVE. Kant: Formalism, disinterested judgement, nonconceptual nature of architecture. TIME-SPACE. Formalism in modern architectural theory. TEMPLUM. CAVE. TENT.

Plato: Metaphor of the Cave (excerpt from Republic); Immanuel Kant: Critique of Aesthetic Judgement (excerpt); Martin Heidegger: The Origin of the Work of Art (excerpt); Siegfried Giedion: Jørn Utzon and the Third Generation

5. PLACE [SPACE] NON-PLACE Nomadic vs. sedentary culture; Polytheistic and Pantheistic vs. Monotheistic idea about nature. CONCEPT and KONTEXT. Spirit of place. Spirit of time. Scale and size. ORIGO. FORREST. MOUNTAIN. DESERT. Christian Norberg Schulz: Natural Place; Rem Koolhaas: Bigness of the Problem of Large; Michael Jacob: On Mountains

6. Seminar II: Image and project. Pictorial representation of the referential project.

7. SENTIMENTAL JOURNEYS Exceptional and ordinary; Permanent and transient. Journeys and discoveries. Erfindung vs. Empfindung.

LANDSCAPE. RUIN. MACHINE. Le Corbusier: Voyage d'Orient (excerpt); Aldo van Eyck: Dogon; Colin Rowe and John Hejduk: Lockhart, Texas; Alison

Smithson: AS in DS (excerpt); Wim Wenders: To Shoot Pictures

8. THE PICTURESQUE Invention of the picturesque: gardening techniques, landscape vs. architecture. Infrastructural corridors and agricultural patterns. COLLAGE. Geological and archaeological layers. Geomorphic and cultural time. GARDEN. ARCHAEOLOGICAL TELL. Zvonimir Radić: Umjetnost oblikovanja; Hans Hollein: Alles ist Architektur; Robert Smithson: A tour of the Monuments of Passaic, New Jersey; Strata. A Geophotographic Fiction

Compulsory and Additional Reading

Compulsory Reading

- Abalos, Iñaki. "Thermodynamic Beauty" Circo (Madrid), 157 (2008); also in Mateo, Josep Lluís and Ivanišin, Krunoslav (eds.). After Crisis. Baden: Lars Müller, Zürich: ETH, 2011: 148-153

- Allen, Stan. "Field Condition." In Stan Allen Architects. Points + Lines. Princeton: Princeton Architectural Press, 1999: 92-102

- Banham, Reyner. "An Ecology for Architecture." In Banham, Reyner. Los Angeles. The Architecture of Four Ecologies. London: Penguin, 1971: 235-245

- Blake, Peter. Le Corbusier, Architecture and Form. London: Penguin, 1964

- Borges, Jorge Luis. Fervor de Buenos Aires: Arrabal (1922). www.literatura.us, accessed 27 September 2015

- Braudel, Fernand. La Méditerranée et le monde méditerranéen à l'époque de Philippe II; Sredozemlje i sredozemni svijet u doba Filipa II. 1. svezak. Zagreb: Antibarbarus, 1997: 25-37; 131-139

- van Eyck, Aldo. "Dogon. Mand – Huis – Dorp – Wereld (1963)." Forum, 17 no.4 (1967): 30-31

- Flaker, Aleksandar. "Star Like Cities, American Actually," Čovjek i prostor (Zagreb), 632-633 (2007): 3-7

- Gregotti, Vittorio. "La forma del territorio; The Shape of Landscape." Edilizia Moderna (Milano), 87-88 (1965): 149-152

- Giedion, Siegfried. "Jørn Utzon and the Third Generation." Zodiac (Milano), 14 (1965): 36-47

- Heidegger, Martin: The Origin of the Work of Art. translated by Roger Berkowic and Philippe Nonnet, draft. Academia.edu, accessed 10 October 2013. Chapter Work and Truth: 24-40

- Hollein, Hans. "Alles ist Architektur." Bau (Wien), 23:1/2 (1968)

- Ivanišin, Krunoslav. "Beginnings." In Mateo, Josep Lluís; Sauter, Florian. Earth, Water, Air, Fire. New York: Actar, 2014: 24-28. - Jacob, Michael. "On Mountains: Scalable and Unscalable." In Allen, Stan & McQuade, Marc (eds.). Landform Building. Baden: Lars Müller, 2011: 136-164

- Kant, Immanuel. Critique of Judgement, part 1: Critique of Aesthetic Judgement (1790), trans. James Creed Meredith. eBooks@Adelaide. University of Adelaide, accessed 12 June 2012

- Koolhaas, Rem. "Bigness of the Problem of Large." Domus (Milano), 764 (1994): 89-90

- Le Corbusier: Journey to the East (1966), trans. Ivan Žaknić. Cambridge Mass.: MIT Press, 1987

Course Learning Outcomes

- Combine the concepts, examples and knowledge theories which surround the practice of architecture and the discussion on architecture into a meaningful whole, evaluate them independently and meaningfully identify the relationships among them – organize one's own perspective on the essence of things and occurrences in the physical environment depending on the natural order and the place of architecture in it – understand the essential interconnection of the way of observing, way of drawing and way of constructing through the interconnection of the text, the picture and the project in the process of creating an architectural work. – Esthetically assess past, contemporary and one's own architectural work free from the ideas, meanings and concepts which are assigned to them according to a program or a convention – Expand one's own horizons thus expanding the limits of the discipline and the construction style through the interconnection of the text, the picture and the project in the process of creating an architectural work.

Course Description

*** Course Objective

enhance the general architectural skills of the students. In pragmatic, professional terms, it will also help them to pictorially represent and verbalize their projects, expanding thus the limits of the architectural project within the real context of its ever decreasing circumference.

Course Syllabus

*** Methods and criteria of evaluation

9. THE SUBLIME Philosophical substance: Burke and Kant. Mathematically and dynamically sublime. Naturally and technologically sublime. Detached point of vision. Architectural limits of the sublime. WINDOW. TELESCOPE. MICROSCOPE. John Ruskin: The Lamp of Power; Ayn Rand: The Fountainhead (excerpt); Slavoj Žižek: Architectural Parallax (excerpt)

10. HORIZONTAL WORLD View. Strategic observation. Cartesian coordinates. ISLAMIC MINIATURE. AXONOMETRIC PROJECTION. MILITARY PERSPECTIVE. Appropriation of the horizon. Calligraphy, art of weaving, art of building. MAP. CARPET. AXIS MUNDI. Curzio Malaparte: La pelle (excerpt); Orhan Pamuk: Painting and Time; Stan Allen: Field Condition; Le Corbusier: Mise au point (excerpt)

11. A VIEW FROM ABOVE: TERRITORIAL SCOPE OF ARCHITECTURE Bergson and Braudel: Longue durée. Geopolitical perspective. Architectural criteria extended on the geographic scale. LANDFORM. PLATFORM. BUNKER. Jørn Utzon: Platforms and Plateaus; Vittorio Gregotti: La forma del territorio; Jorge Luis Borges: Arrival; Fernand Braudel: La Méditerranée et le monde méditerranéen à l'époque de Philippe II (excerpt); Aleksandar Flaker: Star-like Cities

12. Seminar III: Text and project. Preliminary presentation of the images. Verbalization of the referential project.

13. MATERIAL CONSCIOUSNESS Work. Material. Materialism. Material presence. Sensual reality. Materiality of architecture. URBAN PLAN. Richard Sennett: Material Consciousness; Juhani Palasmaa: Hapticity and Time; Peter Blake: Le Corbusier, Architecture and Form (excerpt)

14. AUTONOMY OF ARCHITECTURE Architects and projects. Mies van der Rohe: Notes for a lecture, June 19th 1924; Aldo Rossi: Autonomia dei fatti urbani; Nikola Dobrović: Dubrovnik as a Testimony to Urban Formation

15. Seminar IV: Final presentation by students: TEXT – IMAGE – PROJECT.

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Assessment

SEMINAR: In parallel to the lectures, students will analyse, verbalise and pictorially represent a referential built or non-built project, in relation to some of the paradigms listed in the syllabus. By the end of the course, each student will present the project with one image and one short, 500 to 1000 words text.

Requirements

Regular attendance of the lectures and the seminars, participation in the discussions.

Exam

Presentation of the seminar work (TEXT – IMAGE – PROJECT) handed in the digital and the printed medium.

Compulsory and Additional Reading

Course Learning Outcomes

- Mies van der Rohe, Ludwig. "Notes for a lecture, June 19th 1924." In Neumeyer, Fritz. The Artless World: Mies van der Rohe on the Building Art, trans. Mark Jazombrek. Cambridge Mass.: MIT Press, 1991: 249-250

- Malaparte, Curzio: La pelle (excerpt)

- Norberg Schulz, Christian. Genius Loci, chapter II: Natural Place (1979). New York: Rizzoli, 1980: 23-49

- Le Corbusier. Mise au point (excerpt)

- Pamuk, Orhan. My Name Is Red, chapter 13: Painting and Time (1998). London: Faber, 2001: 8391

- Palasmaa, Juhani. "Hapticity and Time" Architectural Review (London), May (2000): 78-84.

- Plato. Metaphor of the Cave. excerpt from Republic Book VII (360 BC) . classics.mit.edu, accessed 25 September 2015

- Radić, Zvonimir. "Umjetnost oblikovanja." Arhitektura (Zagreb), 6 (1959): 41-69

- Rand, Ayn: The Fountainhead (1943). New York: Signet, 1996: the first two and the last two paragraphs

- Rowe, Colin & Hejduk, John. "Lockhart, Texas." Architectural Record, vol.121, no.3 (1957): 201206

- Ruskin, John. The Seven Lamps of Architecture, The Lamp of Power (1849). In Evans, Joan. John Ruskin, The Lamp of Beauty: Writings on Art. London: Phaidon, 1995: 208-213

- Semper, Gottfried. Die vier Elemente der Baukunst. Braunschweig: Friedrich Vieweg und Sohn, 1851: 50-57

- Sennett, Richard. The Craftsmen, part I, chapter IV: Material Consciousness. London: Allen Lane, 2008: 119-146

- Smithson, Alison. AS in DS, Aspect 4: The Graphics of Movement (1983). Baden: Lars Müller, 2001: 91-111

- Smithson, Robert. A tour of the Monuments of Passaic, New Jersey; Strata, A Geophotographic Fiction (1967). In Flam, Jack (ed.). Robert Smithson. The Collected Writings. Berkeley and Los Angeles: University of California Press, 1996: 68-77

- Utzon, Jørn. "Platforms and Plateaus." Zodiac (Milano), 10 (1963): 110-115

- Vitruvius. De Architectura Libri X, Book II, Chapter I. English translation, www.vitruvius.be, accessed 15 January 2014

- Wenders, Wim. "To Shoot Pictures." In Wenders, Wim. Once. München: Schirmer-Mosel; New York: D.A.P., 2001: 7-15

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

...
Course Objective

Course Syllabus

...
Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

Additional Reading

- Abalos, Iñaki. Atlas pintoresco, Vol. 1: El observatorio. Barcelona: Gustavo Gili, 2005
- Abalos, Iñaki. Atlas pintoresco, Vol. 2: Los viajes. Barcelona: Gustavo Gili, 2008
- Allen, Stan & McQuade, Marc (eds.). Landform Building. Baden: Lars Müller, 2011
- Evans, Robin. Translations from Drawing to Building (1986). In Translations from Drawing to Building and Other Essays. London: Architectural Association, 1997: 153-193
- Gregotti, Vittorio. Il territorio dell'architettura. Milano: Feltrinelli, 1966
- Ivanišin, Krunoslav. "Place [Space] Non-Place." SAJ, 2 (2014): 210-227
- Ivanišin, Krunoslav. Scales of the Sublime etc. Doctoral thesis. Ljubljana: University of Ljubljana, Faculty of Architecture, 2014. - Mateo, Josep Lluis; Sauter, Florian. Earth, Water, Air, Fire. New York: Actar, 2014
- Mitrović, Branko. Phiosophy for Architects. New York: Princeton Architectural Press, 2011

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

*** Course Objective

The course focuses on the acquisition of specialist terminology, developing reading skills, improving knowledge of general English vocabulary, developing written and oral communication skills, presentation skills, business communication skills in architecture. Course materials are based on a selection of authentic texts from various sources with architecture and urban planning-based topics. Topics: city - a human habitat, famous architects, sustainable architecture, business communication in architecture

...

Students are expected to improve their oral and written competence in English for architecture in order to be able to meet the requirements of their academic education and future professional work. Knowledge and skills acquired should help them in their future professional careers and allow them to integrate more successfully into the international business, professional and scientific community within the architectural profession.

Knowledge and skills: developing reading skills, developing oral competence, improving knowledge of specialist vocabulary, presentation skills, business communication skills.

81955

English for Architecture 3

/
Engleski jezik za arhitekturu III

Senior lecturer Neda Borić,
Ph.D.

Summer – Optional course

Language of instruction :
English

15 lectures/sem

1.0 ECTS

Contact:

Senior lecturer Neda Borić,
Ph.D.

nboric@arhitekt.hr

office no.: 306 / 3rd floor

Course Syllabus

*** Methods and criteria of evaluation

Syllabus

1. INTRODUCTION
2. CITY - A HUMAN HABITAT (part I)
3. CITY - A HUMAN HABITAT (part II)
4. SUSTAINABLE ARCHITECTURE (part I)
5. SUSTAINABLE ARCHITECTURE (part II)
6. FRANK GEHRY - GUGGENHEIM MUSEUM, Bilbao (part I)
7. FRANK GEHRY (part II)
8. LE CORBUSIER (part I)
9. LE CORBUSIER (part II)
10. BUSINESS COMMUNICATION in architecture

The remaining planned classes will cover the topics listed above flexibly, depending on their scope and complexity, though additional texts or presentations of specialist topics chosen by the students. The course requires considerable independent work.

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Requirements

Regular attendance

Assessment

Exam (seminar paper and oral presentation)

Compulsory and Additional Reading

Compulsory Reading

University textbook:

- Borić, N. (2007). English for Architecture and Urban Planning.

Golden marketing, Tehnička knjiga.Zagreb.

- Additional shorter texts from English architectural trade journals

- General and specialized dictionaries

Additional Reading

- Selected by students, especially for the seminar paper

Course Learning Outcomes

1. The student will be able to understand and analyze more complex specialist texts and properly interpret their content both in speech and writing.
2. The student will develop the skill of presenting specialist topics.
3. The student will be able to participate in more complex professional debates by presenting their arguments and critical thinking.
4. The student will master specialist terminology and language structures relevant for architecture in order to communicate fluently in speech and writing.
5. The student will master the skill of business communication related to the profession (writing business letters, applications etc., expressing various actions in business communication (application, request etc.)
6. The student will be able to describe their work, projects, buildings, actions, occurrences, processes etc. in speech and writing.
7. The student will be able to assess various areas and problems in the profession and discuss them in speech or writing.

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

*** Course Objective

The course deals with industrial heritage (factories and industrial ares) and technical monuments in wider sense (railway stations, markets, etc) with the purpose of establishing this category of architectural heritage in the context of social and technical history as well as in the architectural and urban planning context. The regeneration and re-use of the wider category of technical monuments heritage is dealt with in the greatest part of lectures.

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Acquaintance with worldwide and Croatian industrial heritage, and the examples of re-use of industrial heritage as a basis for working on re-use projects for these buildings.

193224

Industrial Archaeology
/
Industrijska arheologija

Prof. Zrinka Barišić Marenić,
Ph.D.

Summer – Optional course

Language of instruction : English

15 lectures/sem

1.0 ECTS

Contact:

Prof. Zrinka Barišić Marenić,
Ph.D.

zrinka.barisic@arhitekt.hr

office no.: 203 / II. floor

Course Syllabus

*** Methods and criteria of evaluation

1. Industrial heritage, organization of the subject, its definition and methodology. Affirmation of interdisciplinary approach.
2. Historical framework. Historical development of industrialization in the world with special reference to Great Britain as the home country of the First Industrial Revolution.
3. Historical outline of the development of industry in Croatia. Reasons for its late appearance and introduction of only particular types of industry.
4. Technical culture buildings. Definition and the subject scope. Problems linked to location, spatial and structural principles. Evaluation.
5. Industrial heritage worldwide. Representative examples of technical monuments, their conservation and presentation.
6. Industrial heritage in Croatia. Representative examples (Zagreb, Rijeka, Rovinj, Osijek, Karlovac, Zadar, Split ...).
7. Regeneration and re-use of industrial heritage. Aims and principles of re-use, its methodology, socio-economic aspects and re-use selection criteria.
8. A historical outline of industrial heritage re-use. World (St. Catherine Docks, London; Cannery, San Francisco...) and Croatian re-use examples (Gliptoteka, Zagreb).
9. Regeneration of industrial zones. Industrial- archaeological parks.
10. Re-use of industrial heritage for housing purposes. Analysis and critical review of representative examples.
11. Re-use of industrial heritage for commercial purposes. Analysis and critical review of representative examples.
12. Re-use of industrial heritage for mixed purposes.
13. Re- use of industrial heritage for cultural purposes. Analysis and critical review of representative examples.
14. Re-use of industrial heritage for museums and galleries. Analysis and critical review of representative examples.
15. Bright future? Prospects.

...

Seminar work and oral .ppt presentation of the selected theme.

Compulsory and Additional Reading

Compulsory Reading:

1. Meurs, P.; Steenhuis, M.: Reuse, Redevelop and Design: How the Dutch Deal with Heritage, nai010 publishers in association with Cultural Heritage Agency, NL, Rotterdam, 2017
2. Stratton, M.: Industrial Buildings Conservation and Regeneration, E&FN Soon, 2000. E&FN Soon, 2000

Additional Reading

1. Binney, M.; Machin, F.; Powell, K.: Bright Future, The Re-use of Industrial buildings, SAVE Britain's Heritage, 1990.
2. related papers published within: I., II., III., IV., V. međunarodna konferencija o industrijskoj baštini PRO TORPEDO, Rijeka, 2005. – 2012.

Course Learning Outcomes

On successful completion of the course, the student will be able to:

1. Critically assess the industrial built heritage and built heritage associated with technical and infrastructural achievements.
2. Evaluate the significance of individual designs.
3. Assess the spatial, construction and urban planning potential of industrial heritage.
4. Explain the necessity for restoration.
5. Interpret the quality of reference architectural and urban planning restoration work.
6. Suggest regeneration, or bottom-up interventions, artistic actions, temporary use etc., depending on the needs of the local community.
7. Integrate acquired knowledge as the basis of a restoration project.
8. Plan the restoration of abandoned industrial heritage, especially the most threatened sites.
9. Categorize industrial heritage according to significance, level of threat and restoration priority.
10. Write a conclusion for a research paper on industrial built heritage and built heritage associated with technical achievements.

Component (Course) code
Master course
Professor
Term – semester – Compulsory /
Optional course
Language of instruction
Other languages for consultative
teaching
Type of course unit + additional
activities
ECTS credit
Contact of Professor

Course Description

*** Course Objective

189221 Dynamic development of tourism and recreation requires a constant process of knowledge acquisition about the changing forms of tourism in the context of environmental protection. The course content encompasses general and specialist knowledge about physical and urban planning as well as tourist area development, tourist facilities and tourist and recreational centres. The course focuses on drawing up urban plans of tourist areas (zones). It encompasses an overview and a comment on spatial standards and starting points in planning – programming, dimensioning and design for tourism and recreation purposes.

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This course aims to provide advanced in-depth knowledge about urban planning requirements for tourist and recreational purposes. Students acquire knowledge about programming and planning tourist and recreational areas.

189221

Tourism in Urban and Physical Planning
/
Turizam u urbanističkom i prostornom planiranju

Assoc. Prof. Ana Mrđa, Ph.D.

Summer – Optional course

Croatian / English

15 lectures/sem

1.0 ECTS

Contact:

Associate Prof. Ana Mrđa, Ph.D.
ana.mrdja@arhitekt.hr
office no.: 108 / 1. floor

Course Syllabus

*** Methods and criteria of evaluation

1. Introduction
2. Tourism in space
3. Coastal region
4. Mountain region
5. Rural area
6. Urban area
7. Protected nature
8. Urban and physical planning
9. Standards for construction and development
10. Selected topics – coastal region
11. Selected topics – mountain region
12. Selected topics – rural area
13. Selected topics – urban area
14. Selected topics – protected nature

...

Requirements

Regular attendance and selection of seminar paper topic

Exam

Successful presentation of seminar paper

Compulsory and Additional Reading

Compulsory Reading

1. Baud-Bovy, M.; Lawson, F. (1998) *Tourism and Recreation, Handbook of Planning and Design*, London: Architectural Press, ISBN 0750630868
2. Cooper, C.; Hall, C.M. (2008) *Contemporary Tourism: An international approach*, ISBN 978-0-7506-6350-2
3. Goeldner, C.R.; Brent, R.J.R. (2003.) *Tourism: Principles, Practices, Philosophies*, Pub.: Wiley, John & Sons, Incorporated, ISBN 0471400610
4. Judd, D.R. (2002) *Infrastructure of Play: Building the Tourist City*, Pub. Sharpe, M.e., ISBN 076560955X
5. Van Lier, H.N.; Taylor, P. (ed.) (1993) *New Challenges in Recreation and Tourism Planning*, Elsevier Science, ISBN 0444898492

2. Additional Reading

1. Ashworth, G.; Dietvorst, A. (ed.) (2005) *Tourism and Spatial Transformations: Implications for Policy Planning*, Pub. CAB International, ISBN: 0851989810
2. Gunn, C. A.; Var, T. (2002) *Tourism Planning: Basics, Concepts, Cases*, London: Taylor&Francis, ISBN: 0415932696
3. Harrison, L.C.; Winston H. (ed.) (1996) *Practicing Responsible Tourism: International Case Studies in Tourism Planning, Policy, and Development*, Pub. Wiley, John & Sons, Incorporated, ISBN: 047112236X
4. Judd, D.R.; Fainstein, S. (ed.) (1999.) *Tourist City*, Pub. Yale University Press, ISBN: 0300078463
5. Mieczkowski, Z. (1995) *Environmental Issues of Tourism and Recreation*, Pub. University Press of America, ISBN: 0819199958

Course Learning Outcomes

1. Independently integrate the knowledge of architecture and urban planning with the process of research, design and construction of an architectural and urban design solution.
2. Research the factors significant for the project and incorporate them into the project program which can be identified in real, everyday context.
3. Identify the basic principles and legal and financial framework for organizing a professional practice and project management.
4. Organize and plan construction and physical planning works, and supervision of the implementation of physical and urban area development plans and projects.
5. Lead an interdisciplinary project and research team of experts, incorporate its conclusions into the development and implementation of the project.
6. Be eligible for admission into the postgraduate artistic and scientific program in the field of architecture and urban planning.
7. Plan and develop personal competencies by keeping up to date with architectural achievements and participating in available architectural training programs.
8. Publicly present socially responsible architecture which promotes knowledge, altruism and skepticism about prejudice, and challenges the conventional.

Component (Course) code
 Master course
 Professor
 Term – semester – Compulsory /
 Optional course
 Language of instruction
 Other languages for consultative
 teaching
 Type of course unit + additional
 activities
 ECTS credit
 Contact of Professor

Course Description

*** Course Objective

Course Syllabus

*** Methods and criteria of evaluation

Compulsory and Additional Reading

Course Learning Outcomes

242079

Adaptability of Buildings

/
Prilagodljivost zgrada

Assist. Prof. Neda Mrinjek
Kliska, PhD

Summer – Optional course

Language of instruction :
English

15 lectures/sem

1.0 ECTS

Contact:

Assist. Prof. Neda Mrinjek
Kliska, PhD.
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office no.: 101 / I. floor

Profound transformations in contemporary society create undetermined open conditions that cause rapid obsolescence of buildings. Therefore, the ability of a building to adapt during its life cycle becomes a fundamental quality of its sustainability. The course deals with the architectural features of buildings that enable adaptation to changed requirements in their life cycle. Contemporary buildings consist of a series of layers of different durability – starting from the structure as the most durable layer to the partition walls as a layer with the shortest lifespan. The layers of a building change at different rate depending on the inherent longevity of the built-in materials as well as external sociological and technological changes. The subject of this course is a spatial configuration of the adaptable building as well as the architectural features and relationships between its layers of different durability. Students will apply acquired theoretical knowledge to a selected example of a building, analysing the qualities that enabled the accommodation of the change in its life cycle so far.

1. Introduction to the course - content overview and discussion
2. Aging vs. Obsolescence
3. Concepts of Adaptability in Architecture
4. Polyvalence, Flexibility and Extendibility of Buildings
5. Layers of Buildings
6. Ownership vs. Requirements for Adaptation of Buildings
7. Durable Layers of Buildings
8. Short Lifespan Layers of Buildings
9. Structure of Adaptable Buildings
10. Services of Adaptable Buildings
11. Envelope of Adaptable Buildings
12. Space plan of Adaptable Buildings
13. Workshop: selection and presentation of the examples for analysis
14. Workshop: analysis of qualities that enable the adaptation of selected examples
15. Final presentation, seminar presentation and discussion

Course Completion Requirements:

Regular class attendance, and the result of the work during the semester (practical work and synopsis of the seminar) is presented at a public presentation.

Form of exam / assessment

Seminar paper (submitted and orally defended) and continuous monitoring of practical work.

Required readings

1. Brand, S. (1995.), How Buildings Learn: What happens after they're built, Penguin Books: 12-23, New York
2. Ford, E., (1997.), The Theory and Practice of Impermanence: The Illusion of Durability, "Harvard Design Magazine" 3: 12-18
3. Schneider, T., Till, J., (2005), Flexible housing: the Means to the End, "Architectural Research Quarterly", 9 (3-4): 287-296, Cambridge, UK, https://westminsterresearch.westminster.ac.uk/download/523881e188a0b2a23e93bd962e5188aff98ad47ab796779cfa078e028536d675/226843/Till_Schneider_2005_as_published.pdf [03. 09. 2018.]
4. Slaughter, E.S. (2001), Design strategies to increase building flexibility, Building Research & Information, 29 (3): 208-217; <https://doi.org/10.1080/0961321001002769s>
5. *** (1993.b.), Fourth Dimension in Building: Strategies for Avoiding Obsolescence [ed. Iselin, D.G., Lemer, A.C.] The National Academies Press. Washington; <https://doi.org/10.17226/2124>
6. *** (2001.), Building Deconstruction - International Report [ed. Macozoma, D.S.]: 23-26, <http://site.cibworld.nl/dl/publications/Pub278/05Deconstruction.pdf> [1.9.2018.]

Suggested readings:

1. Durmisevic, E., (2016), Dynamic and Circular Buildings by High Transformation and Reuse Capacity, Sustainable Innovation 2016: 92-96; <https://www.bamb2020.eu/wp-content/uploads/2016/11/Elma-sustainable-innovation-paper.pdf> [pristup 01. 09. 2018.]
2. Habraken, N. J., (2000.), The Structure of the Ordinary. Form and Control in the Built Environment, MIT Press, Cambridge
3. Harvey, D. (1990.), The Condition of Postmodernity. An Enquiry into the Origins of Cultural Change, Blackwell Publishers: 284-307, Cambridge, Massachusetts
4. Hertzberger, H. (2000.), Space and the Architect. Lessons in Architecture 2, 010 Publishers: 174-209, Rotterdam

Current design practice is still mainly focused on the design of a building as a finished and permanent artifact. The objective of this course is to move forward from this linear model to the circular model, considering full life cycle of the building, in which the building is cyclically adapted to the new requirements, thus increasing its longevity. Finishing this course, students will be competent to presume the need for change in the buildings' life cycle. They will be able to anticipate possible spatial changes of the initial design, select appropriate materials for the specific elements and components of the building and presume type of joints to accommodate changes. They will handle the tools that allow a building to adapt, even if the level and the extent of future changes is volatile.

All courses are taught face to face. Due to the epidemiological reasons, teaching process might vary to online teaching.

Most courses are taught in Croatian. Each course offers consultative teaching in English. Some courses also offer consultive teaching in Italian, German, French or Spanish.

Only up to 20% of all offered courses are taught in English – it is impossible to make 30 ECTS only in English!

Students are allowed to participate in lectures offered at other faculties of the University of Zagreb within horizontal mobility (it has to be arranged in accordance to mobility coordinators at both faculties at the University of Zagreb). After enrollment in Zagreb, student mobility coordinator at the host faculty could provide the student with the Approval form for the enrollment of elective courses. Student cannot enroll more than the certain percentage of total ECTS credits at other faculty within the horizontal mobility. It is suggested to have just one additional faculty. University of Zagreb is not a campus and faculties are spread all over the city of Zagreb. Students have to be aware that sometimes they have to prepare two Learning Agreements and will be provided by two Transcript of Records. Student can also enroll Croatian language as an international student at Croaticum or at the Faculty of Croatian Studies (4 ECTS; it was promoted as free of charge for Erasmus students – to be checked).