

### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

History of Architecture 4 [S1Arch1>HA4]

Course

Field of study Year/Semester

Architecture 2/4

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements full-time compulsory

**Number of hours** 

Lecture Laboratory classes Other 0

30

**Tutorials** Projects/seminars

15

Number of credit points

3,00

Coordinators Lecturers

### **Prerequisites**

Knowledge: basic knowledge of general history, basic knowledge of history of architecture and urban planning: from prehistoric period till the end of 18th century, basic knowledge in the understanding of social, economic, legal and other determinants outside the engineering activity of historical process Skills: the use of available sources of information, including electronic sources, student has the ability to correctly conclude on the basis of data from different sources, student knows the basics of descriptive geometry Social competences: understanding of the need to broaden the competences, readiness to work in teams

### Course objective

• Presentation of the continuity of European architectural tradition in the plane of evolution of the needs, technique and beauty in the crucial period of the late 18th century and 19th century and the beginnings of 20th century (around 1750-1945), • Defining relations between the technical capabilities, which has arisen as a result of industrial revolution and the new directions of architecture development, • The course draws attention to the origins of new trends in history of architecture the 19th century, which led to the development of modern architecture and presents the most important works of art, authors and theories of European and American architecture in the discussed period, • Informing about unchangeable rules of creative thinking and enquiry to new functional, technical and formal solutions, • Allowing to learn basic issues related to the urban and architectural composition, realizing work in a small group, developing interpersonal skills and finding the students in the different roles, creating a platform to practice the skills of building analysis from different periods, • Providing a comparative assessment of the methods of graphical presentation • Developing the necessary professional vocabulary and increases the ability to formulate and confront the individual ideas in the forum of group.

## Course-related learning outcomes

### Knowledge:

Student knows and understands:

B.W1. theory of architecture and urban planning useful for formulating and solving simple tasks in the field of architectural and urban design as well as spatial planning;

B.W2. the history of architecture and urban planning, contemporary architecture, heritage protection to the extent necessary for architectural, urban and planning creativity;

#### Skills:

Student can:

B.U1. integrate knowledge from various areas of science, including history, history of architecture, history of art and protection of cultural goods in solving engineering tasks;

B.U2. recognize the importance of non-technical aspects and effects of an architect's design activity, including its impact on the cultural and natural environment;

#### Social competences:

Student is capable of:

B.S1. formulating opinions on the achievements of architecture and town planning, their determinants and other aspects of the architect's activity, as well as providing information and opinions;

B.S2. reliable self-assessment, formulating constructive criticism regarding architectural and urban planning activities.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

A series of lectures of History of Architecture 4 ends with the exam. Students get a list of current exam issues and drawing topics. There is proposed zero term and two terms of exam in the session, but the second term is a resit examination. The exam of the History of Architecture 4 course is written. The integral part of exam is drawing skills test. The grade for written exam is an average of partial grades (knowledge and drawing skills). Grading scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0

Laboratories of History of Architecture\_4 take the issue of changes in historical space of the city, which took place in 19th century. A series of classes includes authorial presentations of students (concerning the selected parts of the city), each closed by discussion about the most important problems raised by the authors and methods and techniques of self-presentation. Students prepare presentation on the basis of individual consultations with the teacher. Both merits value of presentation as well the form and performance are assessed. Activity of students during discussion is important for classes and for acquiring social skills. On the basis of students activity teacher can assess the current understanding of discussed problems by each student. Additionally the active participation in discussion allows to develop the necessary vocabulary and increases the ability to formulate and confront the individual views in public. Each Student is asked to make a presentation on a given topic. It should take roughly 8-10 minutes and cover the most important aspects of the issue and provide for graphical materials that can be rendered by Students in their Sketchbooks. Each presentation should have a title slide, then a bibliography that should be commented, subseuently a slide with a list of content and followed by 10-12 slides on the topic. Sketchbook is a compulsory part of the course. Each of the topics should be rendered in the Students

sketchbook and should comprise of both: graphic and text notes (on annotations / arrows). All the notes should be available for a review (at all times of the semester).

During the semester a test may be announced. The final laboratory grade is an average of partial grades: assessment for the merits of presentation, assessment for the form of presentation, assessment for activity during classes and assessment of sketchbook.

# Programme content

Classes on the History of Architecture of the 19th and 20th centuries include lectures (30 hours) and exercises (15 hours).

Topics discussed:

problems of architecture and urban planning, mainly in Europe and Poland in the 19th and the first half of the 20th century

social, political and aesthetic context of the phenomena discussed analysis of selected objects in terms of construction, materials and aesthetics

## **Course topics**

#### **LECTURES**

There are 15 meetings in the semester. Lectures are conducted once a week. The length of the meeting is 90 minutes.

Lecture no 1. The Industrial Revolution. New building materials - iron and steel. The early engineering structures.

Lecture no 2. The first use of cast iron – factories. The early framing structures. The use of cast-iron in public buildings. Henri Labrouste, the Sainte-Geneviève Library, the Richelieu-Louvois annex of France's National Library.

Lecture no 3. New building materials: the use of glass and iron structure. The spread of glass technology. The shipbuilding and the long span roof. The greenhouses. The Great Exhibitions in 19th century.

Lecture no 4. The Chicago School. The balloon-frame structure. Henry Hobson Richardson, William Le Baron Jenney, Holabird and Roche, Burnham and Root, Luis Sullivan.

Lecture no 5. New York architecture. Daniel Burnham. Wiliam Van Alen. Raymond Hood. Statue of Liberty. The organic architecture. Frank Lloyd Wright, the live and work. The Prairie Houses.

Lecture no 6. Frank Lloyd Wright, the live and work. Frank Lloyd Wright's Public Buildings and Textile Block Houses. The Usonian Houses.

Lecture no 7. New building materials: the reinforced-concrete structure. Francois Hennebique: the betonarme. Auguste Perret. Tony Garnier's Cite Industrielle. The bridges of Robert Maillart. The market halls. The railway stations.

Lecture no 8. The Secession Movement. Arts and Crafts Movement. Brussels as the Center of Contemporary Art. Henri van de Velde. Victor Horta. L'Espirit Nouveau – France. Antonio Gaudi y Cornet – Barcelona.

Lecture no 9. The Secession Movement. Germany. Vienna Secession in Austria. The Glasgow School of Architecture. Russia. Poland. The Zakopane Style. The Secession Movement in Poznan.

Lecture no 10. The functionalism in architecture. The modern factory. The Deutsche Werkbund's exhibition in Cologne (1914). The Weissenhof Settlement (1927). The WU-WA Estate, Wroclaw, Poland, (1929).

Lecture no 11. The Staatliche Bauhaus. Weimar. The principles and significance of Bauhaus school. The Bauhaus Buildings in Dessau. The housing estetes in 19th and 20th century.

Lecture no 12. Le Corbusier, the live and work.

Lecture no 13. Mies van der Rohe, the live and work. Expressionism in architecture.

Lecture no 14. Art movements at the beginning of the 20th century. The avant-garde architecture. The Cubism, the Expressionism, the Suprematism, the Futurism, the Constructivism. Soviet constructivism. The fascist architecture.

Lecture no 15. The non-representational style and de Stijl. The Polish avant-garde architecture. Summary of the classes. Complementary of lectures contents.

### **LABORATORIES**

There are 7-8 meetings in the semester. The have a structure of conversatories with an additional in situ meeting. Laboratories are conducted once in two weeks. The length of the meeting is 90 minutes. A schedule of meetings:

- 1. Introduction: preliminary issues and course assumptions, content of the course, assignment of topics, terms & conditions, exam formula, Explanatory talk: how to talk in front of the group?
- 2. Conversatories I

- Conversatories II
- 4. Laboratory: summary
- 5. Conversatories III
- 6. Conversatores IV
- 7. XIX century Poznań in situ
- 8. Test

#### **CONVERSATORY I - List of topics:**

- 1. Nineteenth-century city changes in urban space: Paris
- 2. Nineteenth-century city changes in urban space: Vienna
- 3. Nineteenth-century city changes in urban space: Cologne
- 4. Nineteenth-century housing reforms: Arturo Soria y Mata
- 5. Nineteenth-century housing reforms: XIX century tenement house
- 6. Nineteenth-century housing reforms: Tony Garnier
- 7. Nineteenth-century housing reforms: Falanster + Familister
- 8. Nineteenth-century housing reforms: Ebenezer Howard

### **CONVERSATORY II - List of topics:**

- 1. Nineteenth-century housing reforms: Worker's houses
- 2. Nineteenth-century housing reforms: Ideal housing estates
- 3. Twentieth- century avant-garde housing programs: Red Vienna
- 4. Twentieth- century avant-garde housing programs: Berlin
- 5. Twentieth- century avant-garde housing programs: Holand
- 6. Twentieth- century avant-garde housing programs: Werkbund
- 7. Twentieth- century avant-garde housing programs: Frankfurt's kitchen

#### **LABORATORIES**

- · Summary of the first topic package of the semester,
- Evaluation of presentation strategies,
- Evaluation of sketchbooks,
- · Discussion,
- Presentation of the Spatial Development of Poznan,

CONVERSATORY III . This conversatory sessions are concentrated on revisions and case studies from the issues discussed on the lectures. List of topics:

- 1. The Chicago School Luis Sulivan.
- 2. Frank Lloyd Wright The Prairie Houses.
- 3. The Secession Movement Victor Horta.
- 4. The Secession Movement A. Gaudi.
- 5. Arts and Crafts Movement.
- 6. Vienna Secession.
- 7. The Glasgow School of Architecture.
- 8. The Zakopane Style.

CONVERSATORY IV. This conversatory sessions are concentrated on revisions and case studies from the issues discussed on the lectures. List of topics:

- 1. Walter Gropius, the Bauhaus Building in Dessau.
- 2. Le Corbusier, Five Points of Modern Architecture.
- 3. Mies van der Rohe, case study: the Tugendhat house, Brno.
- 4. Expressionism in architecture.
- 5. Soviet constructivism.
- 6. Art movements at the beginning of the 20th century that influenced the avant-garde architecture.
- 7. Preasens Group in Warsaw.

### MEETING IN SITU

- Real / virtual walk in the Poznan City Center: XIX and XX century development.
- Sketches in the Sketchbook (in situ / from google streetview)
- Short movies prepared by Students on their individual visits in situ

# **Teaching methods**

Exposition of knowledge is performed by students themselves, but with a careful control of a tutor held on compulsory consultations. Graphical method is used to analyze spatial problems and their solutions. Understanding of spatial arrangement is deepened by mastering the ability to draw quick synthetic sketches during listening to presentations. Techniques of public presentation are learned through a process of assessment of outcomes of other student's works with a use of discussion based on predefined

### categories.

# **Bibliography**

#### Basic

- 1. Frampton K., Modern Architecture, a critical history, Thames & Hudson- Third Edition, 1992.
- 2. Giedion S., Space, Time and Architecture, Cambridge, Massachusetts, Harvard University Press, 1971
- 3. Jencks Ch., Modern Movements in Architecture. Penguin Books Ltd second edition, 1993.
- 4. Mallgrave H.F., Modern architectural theory, Cambridge University Press, 2005.
- 5. Pevsner N., An Outline of European Architecture, Penguin Books, Harmondsworth, Middlesex, 1963.
- 6. Pevsner N., Pioneers of Modern Design: From William Morris to Walter Gropius, Penguin Books Ltd., 1991.
- 7. Saylor H.H., Dictionary of Architecture, Science Edition, John Wiley and Sons Ltd, 1963.
- 8. Watkin D., A History of Western Architecture, Hali Publications, 2005

#### Additional

- 1. Benevolo L., The origins of Modern Town Planning, MIT Press, 1971.
- 2. Norberg-Schulz Christian, Intentions in Architecture, Allen & Unwin LTD, 1966.
- 3. Fletcher B., Key Monuments of Architecture; Phaidon; New York 1998.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	45	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,00