

## **SEMESTER I**

**Institute :** Institute of Architecture

**Subject :** Anthropology

**Subject code :**

**Subject type:** general/optional

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies:** 1

**ECTS points:** 1

**Supervisor:** Tomasz Drewniak, DSc

### **Objectives**

The aim of the course is to introduce typical of Western European culture, categories of human philosophy, their presentation and implications (also assumptions) in spatial sphere of human activity as a means of defining, cognising and organising space. The essence of space organisation is presented on the basis of analysis of correlations between various forms of human activity – satisfying needs, work, war, social activity, religious life, consumption, recreation, entertainment, etc., and specific for them places and interrelated system.

### **Prerequisites**

Fundamental knowledge of history of arts and culture, of social and economic phenomena, observability, self-reflection.

### **Subject`s topical content**

Concepts: anthropology, human habitat, place, space, civilisation, habitat axiology, human being correlation – space perception – organisation of space and social structure. Greek polis as a political community. Characteristics of social and political polis and its mythical premises. Man as a being struggling and doomed to die. Political organisation of space exemplified with Athens. Sophists and discovery of divergence of natural (nature) and human orders (culture, society, state). City-state crisis and the ways of overcoming it (Socrates). Plato`s ideal state. Human nature and the organisation of social and political structures. Rational (ideal) organisation of human life. Aristotle`s polythea: social and political image of man, versatility of leadership types within a polis, state traits. Crisis of political citizenries and emergence of universal state (Hellenism). Hellenic architecture as an expression of new habitat organisation: a) human habitat as a cosmopolis (stoicism); b) habitat as privacy (epicureism); c) habitat as a „ultra-mundane“ world (gnosticism). Judaism as a religion of „destination“. God, man, world, space and time in the Old Testament (habitat as „another world“ – faith communion). Origins of Christianity: theology and ethics of the New Testament. „Another world“ as a universal love communion awaiting the „doomsday“. Man in celestial and earthly orders. Relationship between divine and mundane worlds according to St. Augustine. Social and cultural changes in the medieval times. Feudalism. Christian universalism. Castle, monastery, town, cathedral, university – types of medieval context. The theology (architecture) of gothic cathedral. Philosophy of St. Thomas of Aquinas: harmony of divine and mundane orders. Axiology of renaissance individualism. Italian towns. Renaissance art. Desecration of social and political order: a) N. Machiavelli – „Prince“; b) T. More (Morus) – „Utopia“. Protestantism and rational organisation of earthly order. Religious

origins of capitalist work rationalisation. Desecration of the earth and space order. Cartesius and theoretical rationalisation of the world. Baroque synthesis of tension between divine and earthly order. B. Pascal and search for the man lost in infinite space. Modern man as a homo faber, organiser of social, political and economic order. Theoretical foundations of modern habitat organisation: a) T. Hobbes; b) J. Locke; c) A. Smith. The spirit of enlightenment and negation of transcendency of "another world". Human habitat as a world created by and for man (K. Marx). Modern idea of progress (liberalism, communism, socialism, conservatism). Crisis of modern society ethos. Citizen`s, mass`s and consumption societies. Existentialism. Negation of potentialities of the habitat as a "world" and "another world". Postmodernism and globalisation. Man as a „tourist“. Is the man capable of selfunderstanding (space, habitat) without the idea of "habitation" (M. Heidegger)?

### **Main literature**

A. Anzenbacher, Wprowadzenie do filozofii.  
H. Arendt, Kondycja ludzka.  
Z. Bauman, Globalizacja.  
Biblia  
R. Descartes, Rozprawa o metodzie.  
G. Duby, Czasy katedr. Sztuka i społeczeństwo 980-1420.  
U. Eco, Sztuka i piękno w średniowieczu.  
M. Eliade, Traktat o historii religii.  
R. Graves, Mity greckie.  
M. Heidegger, Budować, mieszkać, myśleć.  
K. Kerényi, Mitologia Greków.  
G. van der Leeuw, Fenomenologia religii.  
P. Manent, Intelktualna historia liberalizmu  
N. Machiavelli, Księżę.  
B. Pascal, Myśli.  
Platon, Państwo.  
J. Szacki, Historia myśli socjologicznej.  
W. Tatarkiewicz, Historia filozofii, t.1-3.  
W. Tatarkiewicz, Historia estetyki, t.1-3.  
J. P. Vernant, Źródła myśli greckiej.  
P. Vidal-Naquet, Czarny łowca. Formy myśli i formy życia społecznego w świecie greckim.  
A. Wallis, Socjologia i kształtowanie przestrzeni.  
M. Weber, Etyka protestancka a duch kapitalizmu.

### **Supplementary literature**

#### **Assessment**

Written pass

#### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** General building materials science  
**Subject code :**  
**Subject type:** elementary  
**Teaching form :**  
Laboratory

**Level:** elementary  
**Semester :** winter  
**Semester of studies :** 1  
**ECTS points:** 3 with lecture  
**Supervisor:** Tomasz Malczyk, DSc

### **Objectives**

The student carries out research of selected physical, chemical and resistance properties of various building materials (abrasive, covering materials, mortars, etc.)

### **Prerequisites**

Fundamentals of chemistry and engineering drawing

### **Subject`s topical content**

Presenting the techniques of analysing properties of building materials, interpretation of results

### **Main literature**

Śliwiński J. i inni: Materiały budowlane. Ćwiczenia laboratoryjne, politechnika Krakowska, Kraków, 2001r  
Żenczykowski W.: Budownictwo ogólne. Materiały i wyroby budowlane, T.1, Arkady, Warszawa, 1992r  
Szymański E.: Materiałoznawstwo budowlane z technologią betonu, T. 1 i 2, Politechnika Warszawska, Warszawa, 2001r  
Wichniewicz S.: Wytrzymałość materiałów. Ćwiczenia laboratoryjne, Politechnika Warszawska, Warszawa, 2000r  
Stefańczyk B.: Budownictwo ogólne T. 1, Materiały i wyroby budowlane, Arkady, Warszawa, 2005r

### **Supplementary literature**

### **Assessment**

Laboratory research report and test

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** General building materials science  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**  
**Semester :** Winter  
**Semester of studies :** 1  
**ECTS points:** 3 with laboratory  
**Supervisor:** Tomasz Malczyk, DSc

### **Objectives**

Building materials science including: physical, chemical and strength properties; testing and assessing quality of building materials; materials application in building engineering; market offer of building materials.

### **Prerequisites**

fundamentals of chemistry and engineering drawing

### **Subject`s topical content**

technical issues connected with designing various building constructions. Building systems, materials science. Graphical representation of building elements.

### **Main literature**

Śliwiński J. i inni: Materiały budowlane. Ćwiczenia laboratoryjne, politechnika Krakowska, Kraków, 2001r.,  
Żenczykowski W.: Budownictwo ogólne. Materiały i wyroby budowlane, T.1, Arkady, Warszawa, 1992r.  
Szymański E.: Materiałoznawstwo budowlane z technologią betonu, T. 1 i 2, Politechnika Warszawska, Warszawa, 2001r  
Wichniewicz S.: Wytrzymałość materiałów. Ćwiczenia laboratoryjne, Politechnika Warszawska, Warszawa, 2000r.,  
Łukowski P.: Domieszki do zapraw i betonów, Polski Cement, Kraków, 2003r  
Osiecka E.: Materiały budowlane właściwości techniczne i zdrowotne, Politechnika Warszawska, 2002r  
Boczkowska A. i inni: Kompozyty, Politechnika Warszawska, 2003r  
Czarnecki L., Broniewski T., Hening O.: Chemia w budownictwie, Arkady, Warszawa  
Stefańczyk B.: Budownictwo ogólne T. 1, Materiały i wyroby budowlane, Arkady, Warszawa, 2005r

### **Supplementary literature**

### **Assessment**

written pass

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Elementy projektowania – czy ten przedmiot ma być w 1 **Semesterze** ?????  
brak go w diagramie  
**Subject code:**  
**Subject type:**  
**Teaching form:**

lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 1

**ECTS points:** 6 with classes

**Supervisor:** Beata Majerska – Pałubicka, DSc

**Objectives**

Presenting main principles of space and architectonic constructions planning. Composition, harmony and proportion of building constructions in relation to surroundings and psychic and physical traits of man. Significance of colour, light and texture in perception of architectonic constructions. Principles of designing to meet constructional requirements of form and function.

**Prerequisites**

Subject initiating designing process

**Subject`s topical content**

Principles of space and architectural planning in relation to surroundings and human needs. The lectures cover the following: - aspects of composition, harmony and proportion; - compact and unrestricted forms; - dominants; - formal guiding principles; - formally important locations and points; - form and background; - rhythm. Space and architectonic construction planning in relation psychic and physical traits of man: - distance golden cut; - tendency to geometrisation, limited number; - optical illusion; - man as a measure and target – canon of build and proportion of man, modular system of proportion, Le Corbusier`s "Modulor", aspects of anthropometry; - Principles of designing with man in perspective, integration of form, function and construction. Functionality systems in architectonic constructions regarding requirements of space, light, microclimate, etc. Dimensioning of space and furnishings. Problems of ergonomomy.

**Main literature**

Charytonow E. - Historia Architektury i Formy architektoniczne, PWSZ, 1963;

Marzyński S. - Projektowanie architektoniczne, PWN, 1971;

Mieszkowski Z. - Elementy projektowania architektonicznego, Arkady, 1975;

Neufert - Podręcznik projektowania architektoniczno- budowlanego, Arkady;

Rasmussen S.E. - Odczuwanie architektury, BA Wydz. Murator, 1999;

Tauszyński K.- Wstęp do projektowania, WSiP, 2003;

Zurawski J. - O budowie formy architektonicznej, Arkady ,1987;

**Supplementary literature**

**Assessment**

Final written test

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Elementy projektowania – czy ten przedmiot ma być w 1 **Semesterze** ?????  
brak go w diagramie

**Subject code:**

**Subject type:** faculty

**Teaching form:**

project

**Level:**

**Semester:** Winter  
**Semester of studies:** 1  
**ECTS points:** 6 with lecture  
**Supervisor:** Beata Majerska – Pałubicka, DSc

### **Objectives**

Architectonic composition in 2D and 3D space. Techniques, materials and tools in designing.

### **Prerequisites**

#### **Subject`s topical content**

1. Introduction – discussing project tasks. Topic 1. Relief composition – axial with one/two axes of symmetry. Module as the main component and measure of composition. Module design. Individual correction. 2. Designing module – cont. Compactness of compositional systems. One-axial and two-axial composition. Consultations – project correction. 3. Module handling and project making. Module handling by scaling and differentiating its height – stratification, system dynamising. Acceptance of projects for final execution – final project. 4. Review – correction, acceptance of projects for final execution. 5. Projects submission – conclusions and assessment. Topic 2. Open structural composition. Discussion and presentation of structures existing in nature and those shaped by man. Preliminary designing – conceptual sketches of tectonic systems. 7. Open structural composition cont. Differentiating size and shape of designed areas, shaping various structures. Conceptual sketches (perspective and axonometry of the project) Consultations. 8. Tectonics of components of compositional system. Final selection of materials. Working project – scaled model. Individual correction. 9. Final review of projects, individual correction. Acceptance of projects for execution. 10. Submission of projects, review and assessment. 11. Topic 3. Architecton – essence of architectonic composition. Reciprocal spatial relations of form. Preliminary designing. Conceptual sketches, individual correction. 12. Architecton – creating dynamic and compact compositional system. Defining tectonic lines. Consultations, individual correction. 13. Architecton cont. – working project, 3D model, final correction of compositional system. Materials selection. Consultations. 14. Review of projects – final correction. Acceptance of compositions for execution. 15. Submission of models – conclusions, assessment.

### **Main literature**

### **Supplementary literature**

### **Assessment**

Project classes completed on the basis of project tasks and reviews

**Language:** Polish

**Institute :** Institute of Architecture

**Subject :** Descriptive geometry

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 1

**ECTS points:** 4 with classes  
**Supervisor:** Kszysztof Gerlic, DSc

### **Objectives**

Developing skills in representing spatial solids on a drawing plane, preparing geometric grounds of architectonic solids shaping and practical use of terrain representations, principles of making architectonic-building drawings using standard symbols, methods of graphical visualisation of architectonic objects, developing skills in spatial visualisation.

### **Prerequisites**

Fundamentals of solids geometry

### **Subject`s topical content**

The concept and types of projections, parallel projection and its attributes. Monge`s projection. Representation of main elements of space. Allocation of elements, trapezoid section. Cross-sections. Constructional representations resulting from reciprocal location of elements, shared elements. Oblique parallel projection (shading). Dimensioning – general principles, plane elements. Dimensioning – spatial elements. Representation of perpendicular elements. Architectonic-building drawing – principles of representation, symbols. Architectonic-building drawing – dimensioning. Transformation of projection system. Marked projection – topography, cross-sections, profiles. Marked projection – designing slopes, embankments and excavations.

### **Main literature**

Lewandowski Z.: Geometria wykreślna. PWN, Warszawa 1977.  
Otto F. i E.: Geometria wykreślna. PWN, Warszawa 1975.  
Przewłocki S.: Geometria wykreślna w budownictwie. Arkady, Warszawa 1982.  
Wojciechowski L. Zawodowy rysunek budowlany. WSiP, Warszawa 1997.  
Błach A.: Geometria. Przegląd wybranych zagadnień. Arkady, Warszawa 1998.

### **Supplementary literature**

### **Assessment**

passed test

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Descriptive geometry

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Classes

**Level:**

**Semester:** Winter

**Semester of studies:** 1

**ECTS points:** 4 with lecture

**Supervisor:** dr inż. arch. Kszysztof Gerlic, DSc

### **Objectives**

Developing skills in representing spatial solids on a drawing plane, preparing geometric grounds of architectonic solids shaping and practical use of terrain representations, principles of making architectonic-building drawings using standard symbols, methods of graphical visualisation of architectonic objects, developing skills in spatial visualisation.

### **Prerequisites**

Fundamentals of solids geometry

### **Subject`s topical content**

Technical freehand drawing, European projection – 6 projections. Axonometry. Representation of main elements, allocation of elements, trapezoid section. Cross-sections. Shared elements. Oblique parallel projection (shading). Plane elements dimensioning. Spatial elements dimensioning. Perpendicular elements. Inventory of lecture hall. Building drawing of lecture hall.

### **Main literature**

Lewandowski Z.: Geometria wykreślna. PWN, Warszawa 1977.

Otto F. i E.: Geometria wykreślna. PWN, Warszawa 1975.

Przewłocki S.: Geometria wykreślna w budownictwie. Arkady, Warszawa 1982.

Wojciechowski L. Zawodowy rysunek budowlany. WSiP, Warszawa 1997.

Błach A.: Geometria. Przegląd wybranych zagadnień. Arkady, Warszawa 1998.

### **Supplementary literature**

### **Assessment**

class and homework assignments

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** History of general architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 1

**ECTS points:** 3 with classes

**Supervisor:** Małgorzata Kamińska, DSc

### **Objectives**

Elements of the history of general architecture

### **Prerequisites**

none



### **Subject`s topical content**

Introduction to architecture – main issues concerning architecture. Art in Ancient Egypt. Historical changes in architecture of Old, Mid-old and New State. Sepulchral architecture in Ancient Egypt. Role sculpture and painting. Art in Ancient Greece – Doric, Ionic, Corinthian orders, public utility constructions and temples. Art in Ancient Rome – Romanic orders, new architectural concepts introduced by Romans. Old Christian Art – introduction of new architectural concepts resulting from enlargement of cult places.

### **Main literature**

M. Porębski. Dzieje sztuki w zarysie, t 1. Od paleolitu po wieki średnie, W-wa 1976;  
Sztuka świata, I, II, III, W-wa 1990;  
J. Białostocki. Sztuka cenniejsza niż złoto, W-wa 1974;  
A. Bochnak, Historia sztuki średniowiecznej, - 1973;  
P. Lavedan, Historia sztuki., Wrocław. 1954;  
E. H. Gombrich, O sztuce, W-wa 1999;  
N. Pevsner, Historia architektury europejskiej. W-wa 1979;  
P. Meyer Historia architektury europejskiej W-wa 1973

### **Supplementary literature**

#### **Assessment**

Written assignments

#### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** History of general architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Classes

**Level:**

**Semester:** Winter

**Semester of studies:** 1

**ECTS points:** 3 with lecture

**Supervisor:** Małgorzata Kamińska, DSc

#### **Objectives**

Elements of the history of ancient architecture

#### **Prerequisites**

none

### **Subject`s topical content**

Lecture related topics

### **Main literature**

M. Porębski. Dzieje sztuki w zarysie, t 1. Od paleolitu po wieki średnie, W-wa 1976;  
Sztuka świata, I, II, III, W-wa 1990;

### **Supplementary literature**

#### **Assessment**

Selected topics

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Mathematics

**Subject code :**

**Subject type:** elementary

**Teaching form:**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 1

**ECTS points:** 4 with classes

**Supervisor:** Jolanta Szuba, MSc

**Objectives**

Analytical mathematics and geometry. Main algebraic structures, linear space, linear transformation, linear algebra and analytical geometry in space: matrix, determinant, inverse matrix, vector calculus, plane and line in space, conic sections, revolution, cylindrical and conic surfaces. Sequence limit, function limit and continuity, derivative continuity. Integral of one-variable function: indefinite integral, Riemann`s integral. Application of definite integral.

**Prerequisites**

Fundamentals of mathematics

**Subject`s topical content**

Main algebraic structures (groups, bodies): definitions, attributes and examples. Vector spaces: main definitions, subspaces of linear space, linear independence of vectors. Base and size of vector space. Main linear spaces of: n-dim vectors, real sequences, multinomials. Multinomials: root, factorisation. Rational function. Matrixes: operations transposing. Determinants – elementary transformations of determinants. Vector space: operations, opposite vector, vector length. Scalar product: vector angle, parallel vectors, perpendicular vectors. Vector product. Plane: general equation, normal vector of plane. Equation of plane defined by three points. Reciprocal positioning of planes. Line as a cross-section of two planes. Line in space: parametric equation, direction vector. Inter-section point of plane and line. Oblique lines. Point distance from plane and line. Conic curves: ellipse, hyperbole, parabole, rotary surfaces, cylindrical and conic surfaces. Sequences: arithmetic and geometric, sequence limit, properties if sequence limits. Function limit at point. Vertical and oblique asymptotes of function. Function continuity. Properties of continuous functions. Definition of derivative, function differential, derivatives of high order. Integral calculus of one-variable function: theorems of indefinite integral, examples of integration of rational functions, definition of definite integral, geometric and physical interpretation of definite integral, theorems of definite integrals.

**Main literature**

W. Żakowski: Algebra i analiza matematyczna dla licealistów, WNT, Warszawa 1999.

T. Jurlewicz, Z. Skoczyłaś: Algebra liniowa 2. Definicje, twierdzenia, wzory. Oficyna Wydawnicza GiS, Wrocław, 2004.

**Supplementary literature**

**Assessment**

written exam

**Language**

Polish

**Institute :** Institute of Architecture**Subject :** Mathematics**Subject code :****Subject type:** elementary**Teaching form:**

Classes

**Level:****Semester:** Winter**Semester of studies:** 1**ECTS points:** 4 with lecture**Supervisor:** Jolanta Szuba, MSc**Objectives**

Analytical mathematics and geometry. Main algebraic structures, linear space, linear transformation, linear algebra and analytical geometry in space: matrix, determinant, inverse matrix, vector calculus, plane and line in space, conic sections, revolution, cylindrical and conic surfaces. Sequence limit, function limit and continuity, derivative continuity. Integral of one-variable function: indefinite integral, Riemann`s integral. Application of definite integral.

**Prerequisites**

Fundamentals of mathematics

**Subject`s topical content**

Operations on multinomials and rational functions. Methods of calculating matrix determinant, of defining inverse matrix. Application of scalar and vector product. Tasks leading to equations of plane and line and calculation of the distance between a point and plane or line. Linear transformations. Conic curves: ellipse, hyperbole, parabole, rotary surfaces, cylindrical and conic surfaces. Tasks leading to the application of properties of arithmetic and geometric sequences. Calculating sequence limits. Defining asymptotes and continuity of functions. Calculating derivative of one-variable function, calculating derivatives of higher order. Integration of one-variable functions, examples of rational function integration, transformation and calculation of definite integrals. Application of definite integrals in geometry and physics.

**Main literature**

Ś. Romanowski i W. Wrona: Matematyka wyższa dla studiów technicznych, PWN, Warszawa, część I.

J.Klukowski, I.Nabiałek, Algebra dla studentów. WNT, Warszawa 1999.

**Supplementary literature****Assessment**

written tests and assignments

**Language**

Polish

**Institute :** Institute of Architecture**Subject :** Building mechanics**Subject code :****Subject type:** elementary

**Teaching form:**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 1

**ECTS points:** 2 with classes

**Supervisor:** Kszysztof Gerlic, DSc

**Objectives**

Creating schemes of static constructions, mechanism of load transfer between construction elements, methods of calculating strengths and shifts within and between construction elements, logic of construction development.

**Prerequisites**

Fundamentals of mathematics and physics

**Subject`s topical content**

Introduction, main concepts; concurrent force system – graphic and analytical equilibrium conditions. Moment of force; coplanar forces – equilibrium conditions. Conditions of static determinability, supports; bearing reactions. Loading, standards of loading, values of loading. Bending moment, shearing forces and axial forces. Free-ends beam – determining internal reactions and forces. Articulated multi-span beams – positioning of joints, determining internal reactions and forces. Frames – principles of shaping. Statically determinate frames. Arches – arch tension line, tri-joint arches. Trusses – principles of shaping; determining internal forces – Cremona`s method. Trusses – determining internal forces – Ritter`s method. Static moment against line, geometric centre, moment of inertia. Steiner`s theorem, moment of deviation, main central axes of deviation – Mohr`s circle.

**Main literature**

Kolendowicz T.: Mechanika budowli dla architektów. Arkady, Warszawa 1993

Pyrak S., Szulborski K.: Mechanika konstrukcji dla architektów, przykłady obliczeń. Arkady, Warszawa 1994

**Supplementary literature****Assessment**

Tests

**Language**

Polish

**Institute** Institute of Architecture

**Subject:** Building mechanics

**Subject code :**

**Subject type:** elementary

**Teaching form:**

Classes

**Level:**

**Semester:** Winter

**Semester of studies:** 1

**ECTS points:** 2 with lectures

**Supervisor:** Kszysztof Gerlic, DSc

**Objectives**

Creating schemes of static constructions, mechanism of load transfer between

construction elements, methods of calculating strengths and shifts within and between construction elements, logic of construction development.

### **Prerequisites**

Fundamentals of mathematics and physics

### **Subject`s topical content**

Coplanar force system - equilibrium conditions. Convergent system of forces – conditions of equilibrium. Plane random forces layout. Free-end beams – determining reactions and moments on bearings. Statically determinate frames – determining internal forces.

### **Main literature**

Kolendowicz T.: Mechanika budowli dla architektów. Arkady, Warszawa 1993

Pyrak S., Szulborski K.: Mechanika konstrukcji dla architektów, przykłady obliczeń.

Arkady, Warszawa 1994

### **Supplementary literature**

### **Assessment**

Projects, activity

### **Language**

Polish

**Subject:** Plastic arts

**Subject code:**

**Subject type:** elementary

**Teaching form:**

Laboratory

**Level:**

**Semester:** Winter

**Semester of studies:** 1

**ECTS points:** 3

**Supervisor:** Ryszard Szymończyk, MA

### **Objectives**

Visual perception, analysis, selection and synthesis of visual traits of structures man-made and natural forms. Free-hand sketching.

### **Prerequisites**

Basic artistic skills

### **Subject`s topical content**

Introducing the syllabus and tasks. Perception. Presentation of selected works. Parallel perspective with one vanishing point, oblique perspective with two vanishing points, perspective with three vanishing points. Frog-perspective. Constructions based on geometric forms (square, circle) in perspective. Constructing solids above and under horizon. Linear free-hand drawing. Sketching pad and its role. Solids in vertical architectonic composition. Determining horizon line and proper perspective. "Pencil" measurement. Differentiation of line dynamics. Linear constructional drawing. Solids in architectonic horizontal composition. The role of point of view in proper assessment of an object. Optical illusion of level planes. Linear constructional drawing. Still life objects and their evaluation. Space organisation with light-and-shade effects. Value grading by line stratification. Factual graphic composition. Drawing techniques study. Practising artistic means to obtain various forms of surface. Zoomorphic forms, play-ground architecture. Operating spatial module. Combining and intersecting solids. Synthesis of

forms. Perspective. Interior as a plane enclosed space. Parallel or oblique perspective from the point of view of human eye.

### **Main literature**

### **Supplementary literature**

### **Assessment**

Assignments

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Theory of architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 1

**ECTS points:** 2

**Supervisor:** Jacek Włodarczyk, prof.

### **Objectives**

Presenting main assumptions in architectonic praxis. Principles of logical and pragmatic space arrangement (part I).

### **Prerequisites**

none

### **Subject`s topical content**

General introduction to the theory of architecture. Main elements of the theory. Architecture and urbanistics. Criteria of architectonic assessment. Characteristics of professional activity. Projects and plans. Function as a basis of space arrangement, architectonic-urban premises. Legislation – building law and urban planning. Constructional systems. The notion of module and constructional axis. Constructional systems in buildings and other structures. Communication as an element of building space. Stairs as the main vertical communication element. Elements of form in architecture in the past, evolution, and in the future. General characteristics of most frequently encountered architectonic objects from the point of view of functionality.

### **Main literature**

Jackiewicz W. Definicja architektury środowiskowej. PWSZ Nysa. 2002.

Heino Engel. Tragsysteme, Structure Systems. DVA Stuttgart. 1997.

Polskie akty prawne (Ustawa Prawo budowlane i przepisy związane, inne).

### **Supplementary literature**

### **Assessment**

Activity, tests and exam

**Language**  
Polish

**SEMESTER II**

**Institute :** Institute of Architecture  
**Subject :** General building and materials science  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**  
**Semester:** Summer  
**Semester of studies:** 2  
**ECTS points:** 2  
**Supervisor:** Tomasz Malczyk, DSc.

**Objectives**  
Presenting the scope of general building engineering. Technological aspects of general building.

**Prerequisites**  
Basic knowledge of mechanics, materials science and engineering drawing.

**Subject`s topical content**  
Technical aspects of designing and building execution. Building systems, materials, graphic representation of building elements. Architectonic-building documentation. Modern building technological designs.

**Main literature**  
Moj E., Śliwiński M. I inni: Podstawy budownictwa, T. 1 i 2, Politechnika Krakowska, Kraków, 2000r  
Parczewski W., Wnuk Z.: Elementy robót wykończeniowych, Politechnika Warszawska, Warszawa, 1998r  
Mielczarek Z.: Nowoczesne konstrukcje w budownictwie ogólnym, Arkady, Warszawa, 2001r  
Praca zbiorowa: Nowy poradnik majstra budowlanego, Arkady, Warszawa  
Neufert E.: Podręcznik projektowania architektoniczno-budowlanego, Arkady, Warszawa  
Dąbrowski O., Kolendowicz T.: Poradnik inżyniera i technika budowlanego, Arkady, Warszawa

**Supplementary literature**

**Assessment**  
written exam

**Language**  
Polish



**Institute :** Institute of Architecture  
**Subject :** General building and materials science  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Project

**Level:**  
**Semester:** Summer  
**Semester of studies:** 2  
**ECTS points:** 2  
**Supervisor:** Tomasz Malczyk, DSc.

### **Objectives**

Presenting the principles of building constructions drawing, designing, materials selection.

### **Prerequisites**

Basic knowledge of mechanics, materials science and engineering drawing.

### **Subject`s topical content**

Preparing a project of a detached house in fine-dimension technology. The project will consist of appropriate projections and sections of the building and its elements.

### **Main literature**

Moj E., Śliwiński M. I inni: Podstawy budownictwa, T. 1 i 2, Politechnika Krakowska, Kraków, 2000r  
Parczewski W., Wnuk Z.: Elementy robót wykończeniowych, Politechnika Warszawska, Warszawa, 1998r  
Mielczarek Z.: Nowoczesne konstrukcje w budownictwie ogólnym, Arkady, Warszawa, 2001r  
Praca zbiorowa: Nowy poradnik majstra budowlanego, Arkady, Warszawa,  
Neufert E.: Podręcznik projektowania architektoniczno-budowlanego, Arkady, Warszawa  
Dąbrowski O., Kolendowicz T.: Poradnik inżyniera i technika budowlanego, Arkady, Warszawa

### **Supplementary literature**

### **Assessment**

project

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Descriptive geometry  
**Subject code :**  
**Subject type:** elementary  
**Teaching form :**  
Lecture

**Level:****Semester:** Summer**Semester of studies:** 2**ECTS points:** 2 with classes**Supervisor:** Kszysztof Gerlic, DSc.**Objectives**

Developing skills in representing spatial solids on a drawing plane, preparing geometric grounds of architectonic solids shaping and practical use of terrain representations, principles of making architectonic-building drawings using standard symbols, methods of graphical visualisation of architectonic objects, developing skills in spatial visualisation.

**Prerequisites**

Completed Semester I

**Subject`s topical content**

Polyhedrons – representation, cross-sections; prisms, pyramids. Intersection of polyhedrons. Development of polyhedronic surfaces. Central projection – perspective and its elements. Background tracing and intersection points. Shade in perspective. Second-order curves, spherical projection. Cylinder and cone – representation, intersection.

**Main literature**

Lewandowski Z.: Geometria wykreślna. PWN, Warszawa 1977.

Otto F. i E.: Geometria wykreślna. PWN, Warszawa 1975.

Przewłocki S.: Geometria wykreślna w budownictwie. Arkady, Warszawa 1982.

Wojciechowski L. Zawodowy rysunek budowlany. WSiP, Warszawa 1997.

**Supplementary literature****Assessment**

test

**Language**

Polish

**Institute :** Institute of Architecture**Subject :** Descriptive geometry**Subject code :****Subject type:** elementary**Teaching form :**

Classes

**Level:****Semester:** Summer**Semester of studies:** 2**ECTS points:** 2 with lecture**Supervisor:** Kszysztof Gerlic, DSc.**Objectives**

Developing skills in representing spatial solids on a drawing plane, preparing geometric grounds of architectonic solids shaping and practical use of terrain representations, principles of making architectonic-building drawings using standard symbols, methods of graphical visualisation of architectonic objects, developing skills in spatial visualisation.

**Prerequisites**

Completed Semester I

**Subject`s topical content**

Transformation of projection system – cube, pyramid. Polyhedronic development – roof slope section. Applied perspective – convergence scale. Shading in perspective. Quadric surfaces – cylinder, sphere, cone, vaults. Staircase drawing.

**Main literature**

Lewandowski Z.: Geometria wykreślna. PWN, Warszawa 1977.  
Otto F. i E.: Geometria wykreślna. PWN, Warszawa 1975.  
Przewłocki S.: Geometria wykreślna w budownictwie. Arkady, Warszawa 1982.  
Wojciechowski L. Zawodowy rysunek budowlany. WSiP, Warszawa 1997.

**Supplementary literature****Assessment**

class and homework assignments

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** History of general architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester of studies:** 2

**ECTS points:** 3 with classes

**Supervisor:** Małgorzata Kamińska, DSc

**Objectives**

Elements of the history of general architecture

**Prerequisites**

none

**Subject`s topical content**

Introduction to architecture – main issues concerning architecture. Art in Ancient Egypt. Historical changes in architecture of Old, Mid-old and New State. Sepulchral architecture in Ancient Egypt. Role sculpture and painting. Art in Ancient Greece – Doric, Ionic, Corinthian orders, public utility constructions and temples. Art in Ancient Rome – Romanic orders, new architectural concepts introduced by Romans. Old Christian Art – introduction of new architectural concepts resulting from enlargement of cult places.

**Main literature**

M. Porębski. Dzieje sztuki w zarysie, t 1. Od paleolitu po wieki średnie, W-wa 1976;  
Sztuka świata, I, II, III, W-wa 1990;  
J. Białostocki. Sztuka cenniejsza niż złoto, W-wa 1974;  
A. Bochnak, Historia sztuki średniowiecznej, - 1973;  
P. Lavedan, Historia sztuki., Wrocław. 1954;  
E. H. Gombrich, O sztuce, W-wa 1999;  
N. Pevsner, Historia architektury europejskiej. W-wa 1979;  
P. Meyer Historia architektury europejskiej W-wa 1973

## **Supplementary literature**

### **Assessment**

Written tests.

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** History of general architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Classes

**Level:**

**Semester:** Summer

**Semester of studies:** 2

**ECTS points:** 3 with lecture

**Supervisor:** Małgorzata Kamińska, DSc

### **Objectives**

Elements of the history of ancient architecture

### **Prerequisites**

completed subject,

### **Subject`s topical content**

Lecture related topics

### **Main literature**

M. Porębski. Dzieje sztuki w zarysie, t 1. Od paleolitu po wieki średnie, W-wa 1976;  
Sztuka świata,I,II,III ,

## **Supplementary literature**

### **Assessment**

Selected topics.

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Municipal technical infrastructure

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester of studies:** 2

**ECTS points:** 2

**Supervisor:** Krzysztof Gasidło, DSc.

**Objectives**

Main aspects of municipal infrastructure, its exploitation and management and application in architectonic and urban planning

**Prerequisites**

Technical knowledge at secondary-school level,

**Subject`s topical content**

Main information on transportation systems (trains, cars, bicycles, etc), railway stations, water ports, airports; municipal transport; water supply, wastes and rain water disposal, storing, removing and utilisation of wastes; electricity, heating and gas supply; telecommunication.

**Main literature**

**Supplementary literature**

**Assessment**

written test

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Building installations

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester :** Summer

**Semester of studies :** 2

**ECTS points:** 2 with classes

**Supervisor:** Tomasz Malczyk, DSc.

**Objectives**

Main concepts regarding building installations and their application in architectonic-building planning

**Prerequisites**

Basics of general building engineering, building physics and engineering drawing

**Subject`s topical content**

Technical issues concerning building installations such as sanitary, electrical, alarm systems; use of ecological energy sources and their impact on the building architecture

**Main literature**

Ogrzewnictwo, ciepłownictwo, wodociągi i kanalizacja (zbiór norm)

Bakowski K., Batruś J., Zajda R.: Projektowanie instalacji gazowych, Arkady, Warszawa, 1975r

Heidrich Z. i inni: Instalacje w domkach jednorodzinnych, Arkady, Warszawa, 1986r

Nantka M.: Instalacje grzewcze i wentylacyjne w budownictwie, cz. 1, Wydawnictwo Politechniki Śląskiej, Gliwice, 2000r

Majerska-Pałubicka B.: Rozwiązania energooszczędne w architektonicznym projektowaniu obiektów handlowych, Wydawnictwo Politechniki Śląskiej, Gliwice, 2001r.

Pienkowski K., Krawczyk D., Tumel W.: Ogrzewnictwo, cz. 1, Politechnika Białostocka, Białystok, 1999r

Mürmann H.: Wentylacja mieszkań, Instalator Polski, Warszawa, 2001r

**Supplementary literature****Assessment**

written exam

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Building installations

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Classes

**Level:**

**Semester :** Summer

**Semester of studies :** 2

**ECTS points:** 2 with lecture

**Supervisor:** Tomasz Malczyk, DSc.

**Objectives**

Conceptual project of selected installations in a housing object. They are: cold and warm water installations, sewage systems, heating, gas, electrical, lightning arresting, draining, rain water disposal, antiburglary installations

**Prerequisites**

Basics of general building engineering, building physics and engineering drawing

**Subject`s topical content**

Presenting a variety of building installations and their functions. Developing skills in applying the acquired knowledge on installations in architectonic designing with respect to purpose and functionality of the building construction.

### **Main literature**

Ogrzewnictwo, ciepłownictwo, wodociągi i kanalizacja (zbiór norm)

Bakowski K., Batruś J., Zajda R.: Projektowanie instalacji gazowych, Arkady, Warszawa, 1975r

Heidrich Z. i inni: Instalacje w domkach jednorodzinnych, Arkady, Warszawa, 1986r

Nantka M.: Instalacje grzewcze i wentylacyjne w budownictwie, cz. 1, Wydawnictwo Politechniki Śląskiej, Gliwice, 2000r.

Majerska-Pałubicka B.: Rozwiązania energooszczędne w architektonicznym projektowaniu obiektów handlowych, Wydawnictwo Politechniki Śląskiej, Gliwice, 2001r

Pienkowski K., Krawczyk D., Tumel W.: Ogrzewnictwo, cz. 1, Politechnika Białostocka, Białystok, 1999r

Mürmann H.: Wentylacja mieszkań, Instalator Polski, Warszawa, 2001r

### **Supplementary literature**

#### **Assessment**

project

#### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Transportation

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester :** Summer

**Semester of studies :** 2

**ECTS points:** 2

**Supervisor:** Konrad Dobrowolski, DSc.

#### **Objectives**

Principles of designing road-street systems in towns, technical-functional classification of streets and cross-sections, grade separated junctions, parking utilites, garages, transport systems and their impact on towns` development. Construction of tranport networks and their elements designing. Process of transport systems planning. Transportation policy. Municipal transport subsytems. Transport objects. Underground infrastructure. Environmental protection and transport threats.

#### **Prerequisites**

General knowledge of the world

#### **Subject`s topical content**

Introducing the lectures (content of the course), preliminary introduction of main concepts and definitions, presentation of main and supplementary literature. Road network construction. Classification of roads and streets. Designing methods. Cross-sections (clearance gauge) and longitudinal sections (grade line). Crossroads and junctions. Designing methods, components. Parking problems. Types, localisation of parking places. Engineering buildings – multistoreyed parkings, bridges, viaducts,

flyovers, tunnels – characteristics. Characteristics of public transport means: bus, tram, tube, others. Designing methods – premises. Man in traffic. Pedestrians and cyclists. Principles of internal car transport. Principles of local car transport. Principles of transportation in housing districts – characteristics and examples. Transport policy – transport in towns – alternatives – examples. Underground infrastructure – water supply and sewage systems. Rain water installations. Water treatment. Examples. Energy supply installations – characteristics and examples. Transportation as a pollution and noise source – ways of fighting it. New trends in motorisation – examples. Film show.

### **Main literature**

Transport miejski, J. Podolski, WKŁ W-wa,

Wytyczne projektowania ulic

Węzły drogowe i uliczne, J. Bartoszewski, WKŁ W-wa

Inżynieria ruchu, S. Datka, W. Suchorzewski, M. Tracz, WKŁ W-wa

Parkingi w miastach, J. Dumnicki, J. Kreczmer, L. Remisz WKŁ W-wa

### **Supplementary literature**

Miejska komunikacja szynowa, E. Sobolewski, J. Słowiński, Arkady W-wa, 1971

Systemy transportu dziś i jutro, E. Bahke, WKŁ W-wa, 1977

Szybka komunikacja miejska, J. Ostaszewicz, M. Rataj, WKŁ W-wa, 1979

Samochód w śródmieściu, P. Olszewski, W. Suchorzewski, WKŁ W-wa, 1983

Miejskie tunele, przejścia podziemne i kolektory, S. Lessaer WKŁ W-wa, 1979

Konstrukcje budowlane dla architektów. Borysewicz, Arkady W-wa, 1978

### **Assessment**

Graded pass test, report

### **Language**

Polish



**Institute :** Institute of Architecture

**Subject :** Building mechanics

**Subject code :**

**Subject type:** main

**Teaching form :**

Lecture

**Level:**

**Semester :** Summer

**Semester of studies :** 2

**ECTS points:** 4 with classes

**Supervisor:** Kszysztof Gerlic, DSc.

### **Objectives**

Principles of static constructions designing, mechanism of load transfer between construction elements, methods of calculation of forces and shifts within and between construction elements, logic of construction building.

### **Prerequisites**

Basics of mathematics and physics

### **Subject`s topical content**

Stresses and strains – definitions and remarks. Hooke`s law, Young`s module, Kirchoff`s module, Poisson`s number. Method of limited states. Tension, compression. Straight bending. Oblique bending. Shearing in bent beams. Torsion. Principal stresses, trajectories. Eccentric loads, core of a cross section. Buckling of bars, Euler`s formula. Elastic-plastic bending, angle of deflection and sag. Statically indeterminate one-support beam. Continuous beams – tables. Earth pressure, water pressure, passive and active; construction stability.

### **Main literature**

Kolendowicz T.: Mechanika budowli dla architektów. Arkady, Warszawa 1993

Pyrak S., Szulborski K.: Mechanika konstrukcji dla architektów, przykłady obliczeń.

Arkady, Warszawa 1994

### **Supplementary literature**

### **Assessment**

Tests

Exam

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Building mechanics  
**Subject code :**  
**Subject type:** elementary  
**Teaching form :**  
Classes

**Level:**  
**Semester :** Summer  
**Semester of studies :** 2  
**ECTS points:** 4 with lecture  
**Supervisor:** Kszysztof Gerlic, DSc.

### **Objectives**

Principles of static constructions designing, mechanism of load transfer between construction elements, methods of calculation of forces and shifts within and between construction elements, logic of construction building.

### **Prerequisites**

Basics of mathematics and physics

### **Subject`s topical content**

Trusses – Cremona`s method. Ritter`s method. Geometric centre, inertia moment, deviation moment, main axes. Absolute moments. Tension and compression. Straight bending. Bending with compression. Oblique bending. Eccentric compression.

### **Main literature**

Kolendowicz T.: Mechanika budowli dla architektów. Arkady, Warszawa 1993  
Pyrak S., Szulborski K.: Mechanika konstrukcji dla architektów, przykłady obliczeń. Arkady, Warszawa 1994

### **Supplementary literature**

### **Assessment**

project and activity, final exam

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Rural settlements  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
project

**Level:**  
**Semester :** Summer  
**Semester of studies :** 2  
**ECTS points:** 3  
**Supervisor:** Wiesława Strabel, DSc.

### **Objectives**

Architectonic designing of rural settlements

### **Prerequisites**

Elements of the theory of architecture. Theory of urbanistics and ruralistics; Elements of designing, general building and materials science.

### **Subject`s topical content**

Individual concept of a new, or modernised, settlement, as adapted to existing surroundings (landscape, function, programme). For a given situation and an area of 2500 up to 3000 m<sup>2</sup>, a functional-spatial programme of household building. The scope of the programme includes: - working model (variant of spatial composition); layout in 1 : 500 scale, - axonometry of the programme; photos of (existing terrain) the model (design state), sketches, perspectives – projections, elevations, cross-sections in 1 : 100 scale. The project should be clear attractive from the point of function and space layout – all presented in graphic form with appropriate notes and remarks on a spreadsheet of 100 x 70 cm.

### **Main literature**

Tłoczek I. Dom mieszkalny na polskiej wsi. PWN, Warszawa.  
Neufert. Podręcznik projektowania architektoniczno-budowlanego. Arkady.

### **Supplementary literature**

### **Assessment**

- 1) Committee assessment (2 supervisors) of the project
- 2) Assessment of project clauses (min. 2) made during classes
- 3) Assessment work advancement

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Plastic arts

**Subject code :**

**Subject type:** elementary

**Teaching form :**

laboratory

**Level:**

**Semester :** Summer

**Semester of studies :** 2

**ECTS points:** 3

**Supervisor:** Ryszard Szymończyk, MA.

### **Objectives**

Developing artistic feeling, developing divergent thinking in artistic process. Acquiring manual skills enabling presentation on individual artistic concepts. Learning the principles and methods of graphics and painting in educational process.

### **Prerequisites**

none,

### **Subject`s topical content**

System of typical constructional forms. Problems of scaling in freehand drawing. Object enlargement. Selecting sculpture-like or architectonic objects. Precise definition of form. Highlighting objects by suitable choice of paper colour and tools. Mixed techniques of pencil, crayon, pen and ink. Water-colour paints. Still life. Graphic study of circle.

Perspective problems, constructing a circle by inscribing it into a perspective system of square. Form highlighting by value. Mixed techniques of pencil and bright crayon. Landscape study. Analysis of plant forms. Establishing characteristic features of species. Joining into groups, interpenetration. Drawing interpretation for future projects. Sticks, markers and pens. Painting analysis of a vertical architectonic object. Perspective with three convergence points. Pencil, pen, water-colours or tempera. Mixed technique. Working outdoors. Graphic study of a simple architectonic building complex. Defining horizon, defining points of convergence for correct perspective of objects. Defining light direction angle. Form highlighting by light-shade modelling. Building elevation in perspective. Defining vertical and horizontal elements of an elevation. Light-shade modelling. Pen or fine-line marker.

### **Main literature**

### **Supplementary literature**

### **Assessment**

Work, attendance and artistic activity

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Theory of architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester :** Summer

**Semester of studies :** 2

**ECTS points:** 3

**Supervisor:** Jacek Włodarczyk, prof.

### **Objectives**

Presenting main concepts related to architecture as a form of creativity. Principles of logical and pragmatic creation and formation of space (part II).

### **Prerequisites**

Completed Theory of architecture, sem. 1

### **Subject`s topical content**

Housing architecture.

Housing estates development viewed historically. Housing areas in a town structure.

Localisation. One-family housing. Building lot management. Types of multifamily housing, premises, terraces, loggias and balconies.

Functional-spatial systems of housing buildings. Constructional schemes.

Fundamentals of constructing a need-for-areas programme.

Present trends in housing interiors design.

Aspects of housing modernisation and humanisation.

### **Main literature**

Włodarczyk J., Strabel W. Specjalne formy budownictwa mieszkaniowego. ARCH-URBS. Katowice. 1991.

Neufert. Podręcznik projektowania architektoniczno-budowlanego. Arkady, Warszawa. 1996.

## **Supplementary literature**

### **Assessment**

Activity, final oral presentation (test, exam).

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Theory of urbanistics and ruralistics

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester :** Summer

**Semester of studies :** 2

**ECTS points:** 2

**Supervisor:** Krzysztof Gasidło, DSc.

### **Objectives**

Knowledge on fundamentals of municipal and rural settlement, which has a practical application in architectonic and urban designing and space planning

### **Prerequisites**

Fundamental knowledge of physical and economic geography at a secondary-school level

### **Subject`s topical content**

Main elements of the theory of urbanistics and ruralistics; genesis and forms of settlement; human settlement as an expression of social relations and civilisation development in history; structure of urbanisation of countryside and municipal areas: housing areas, service utilities, industrial and rural areas, recreational and green areas, mixed utilisation of ground areas; urban planning, urban composition, space planning.

### **Main literature**

Chmielewski J.M: Teoria w projektowaniu urbanistycznym, Oficyna Wyd. Politechniki Warszawskiej, Warszawa 2001

Rzymowski A., Chowaniec M; Ruralistyka, Arkady

ŚlódczykJ: Przestrzeń miasta i jej przeobrażenia, Wyd. Uniw. Opolskiego, Opole 2003

BenevoloL: Miasto w dziejach Europy, Wyd. Krąg, Warszawa 1995

Wejchert K, Elementy kompozycji urbanistycznej, Arkady 1974

## **Supplementary literature**

### **Assessment**

written graded pass test

**Language**  
Polish

**SEMESTER III**

**Institute :** Institute of Architecture  
**Subject :** General building and materials science  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**  
**Semester :** Winter  
**Semester of studies :** 3  
**ECTS points:** 3 with project  
**Supervisor:** Tomasz Malczyk, DSc.

### **Objectives**

Presenting the scope of general building engineering. Technological aspects of general building.

### **Prerequisites**

Basic knowledge of mechanics, materials science and engineering drawing.

### **Subject`s topical content**

Technical aspects of designing and execution of building objects of different sizes utility, combining them with their immediate surroundings. Building structures, elements of external and internal finishings. Modern building technologies for roofwork, elevation systems, finishings, lighting systems, etc. New building materials, e.g. constructional glass.

### **Main literature**

Moj E., Śliwiński M. I inni: Podstawy budownictwa, T. 1 i 2, Politechnika Krakowska, Kraków, 2000r  
Parczewski W., Wnuk Z.: Elementy robót wykończeniowych, Politechnika Warszawska, Warszawa, 1998r  
Mielczarek Z.: Nowoczesne konstrukcje w budownictwie ogólnym, Arkady, Warszawa, 2001r  
Praca zbiorowa: Nowy poradnik majstra budowlanego, Arkady, Warszawa  
Neufert E.: Podręcznik projektowania architektoniczno-budowlanego, Arkady, Warszawa  
Dąbrowski O., Kolendowicz T.: Poradnik inżyniera i technika budowlanego, Arkady, Warszawa

### **Supplementary literature**

### **Assessment**

written test

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Elements of urban composition  
**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 3

**Supervisor:** Konrad Dobrowolski, DSc.

### **Objectives**

Fundamentals of composing and modelling of municipal and countryside areas. Presentation of project sketches. The target is a high-standard municipal structure offering various common facilities satisfying such needs as housing, work, entertainment, etc.

### **Prerequisites**

Elementary knowledge on transportation systems

### **Subject`s topical content**

1. Introduction, project assumptions, assignments. 2. Task discussions, projects, consultations. 3. Projects, consultations. 4. Presentation of project assumptions. 5. Project, consultations. 6. Project, consultations. 7. Project, consultations. 8. Concept presentation. 9. Project, consultations. 10. Project, consultations. 11. Project, consultations. 12. Preliminary project presentation. 13. Project, consultations. 14. Project presentation. 15. Assessment.

### **Main literature**

- Niska intensywna zabudowa mieszkaniowa, Chmielewski Jan Maciej, Katedra Urbanistyki i Gospodarki Przestrzennej Wydziału Architektury Politechniki Warszawskiej, W-wa 1996
- Teoria urbanistyki w projektowaniu i planowaniu miast, Oficyna Wydawnicza Politechniki Warszawskiej, W-wa 2001
- Planowanie miast i osiedli, PWN, W-wa 1970

### **Supplementary literature**

- Kształtowanie zespołów zabudowy mieszkaniowej, Hanna Adamczewska-Wejhert, Arkady, Warszawa 1987

### **Assessment**

attendance, project, report

### **Language**

Polish, English

**Institute :** Institute of Architecture

**Subject :** History of general architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 3 with classes



**Supervisor:** Małgorzata Kamińska, MSc.

**Objectives**

History of mediaeval and modern architecture

**Prerequisites**

**Subject`s topical content**

Caroline renaissance. Preromanesque art. Romanesque architecture in Europe. Romanesque painting and sculpture. Beginnings of Gothic style in France. French cathedrals of XII-XIII c. Gothic architecture in England, Germany, Italy, Spain and Poland. Gothic painting and sculpture. The "Autumn" of mediaeval times. Protorenaissance: Italy, XIII/XIV {Giotto}. History of modern art, early (XV c.) in Italy (Quattrocento): painting, sculpture, architecture; Florence, Umbria, Padwa, Venice schools. Renaissance: Leonardo da Vinci, Rafael, Michael Angelo. Italian Cinquecento. Among others: Venetian school (Griogione, Tycian, Veronese, Tintoretto). Renaissance outside Italy (France, Germany, Netherlands, Poland). Mannerism in Italy. Beginnings of baroque. Baroque in architecture, sculpture (Semini, Borromini, etc.). Baroque architecture North of the Alps. The XVIII century.

**Main literature**

K. Piwocki, Dzieje sztuki w zarysie, t. 2, W-wa 1987; m Sztuka świata, t. 5, 6, 7, W-wa 1992;  
J. Białostocki, Sztuka cenniejsza niż złoto, W-wa 1974;  
A. Bochnak, Historia sztuki nowożytnej, W wa 1970;  
P. Lavedan, Historia sztuki. Średniowiecze i czasy nowożytne, W-wa 1954;  
E. H. .L Historia architektury europejskiej. W-wa 1979;  
M. Levey, Od Giotta do Cezanne'a, W-wa 1998;  
M. Rzepińska, Siedem wieków malarstwa europejskiego, W-wa1998;  
P. Meyer Historia architektury europejskiej W-wa 1973.

**Supplementary literature**

**Assessment**

Written assignments.

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** History of general architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Classes

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 3 with lecture

**Supervisor:** Małgorzata Kamińska, MSc.

**Objectives**

History of mediaeval and modern architecture

**Prerequisites**

**Subject`s topical content**

Students work on topics presented during the lecture

**Main literature**

K. Piwocki, *Dzieje sztuki w zarysie*, t. 2, W-wa 1987; *Sztuka świata*, t. 5, 6, 7, W-wa 1992;

J. Białostocki, *Sztuka cenniejsza niż złoto*, W-wa 1974;

P. Meyer *Historia architektury europejskiej* W-wa 1973.

**Supplementary literature****Assessment**

Passing the assignment on a given topic.

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Informatics

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 2 with laboratory

**Supervisor:** Bogusław Szuba

**Objectives**

Introducing computer assisting architectonic designing programmes.

**Prerequisites**

Knowledge of informatics at secondary-school level.

**Subject`s topical content**

Basics of CAD programmes. Plane drawing, using layers and blocks. Plane drawing documentation and its printing. Elements of 3D modelling. Generating perspectives. Basics of project visualisation. Preparing technical documentation. Basic information on the Internet. Introducing the All Plan 2005 programme. Cognising the programme – modules. Working on projects, layers, carbon paper. Using the mouse. Initiating and leaving a function. Point assistant. Error correction. Saving the work. Type and thickness of line. Colour of elements. Modifying the thickness, type of line, colour of elements. Locker. Selecting elements. Fine drawing. Drawing architectonic elements in 2D. Libraries and styles. Transposing from layer to layer. Drawing architectonic elements in 3D. Drawing walls, windows and doors, roofs. Roofs. Ports in roofs. Ventilation. Staircases. Organising a project. Model building in 3D. Roof surfaces. Lean-to roof. Multi-lean-to roof. Cradles. Mansard roof. Lucarne. Roof constructions. Rafter plates. Rafter. Bidding rafter. Pole. Angle brace. Roof tie. Collar beams. Trimmer. Constructing cross-sections. Elevation construction, perspective and axonometry. Digital model of terrain. Actual and designed state. Terrain cross-sections. Surfaces modelling in 3D. Sphere, cone, polyhedron, etc. Macroes. Shade calculation. Materials texture. Quantitative estimation. Project visualisation. Film show.

**Main literature**

Kaczor P.: CorelDRAW Graphics Suite 11, Mikom 2003.  
Maćku B.: CorelDRAW 12, Corel PhotoPaint 12, Mikom 2004.  
Żak A.: CorelDRAW Skrypty., Mikom, 2004.

**Supplementary literature**

Podręcznik All Plan. Nemetschek Polska. Warszawa 2005.  
Biały W., Bobkowski G.: AutoCAD 2004 i AutoCAD Mechanical 2004 w zagadnieniach technicznych, WNT, 2004.

**Assessment**

test

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Informatics

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Laboratory

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 2 with lecture

**Supervisor:** Bogusław Szuba

**Objectives**

Expanded informatics knowledge. Introducing computer assisting architectural designing programmes.

**Prerequisites**

Knowledge of informatics at secondary-school level.

**Subject`s topical content**

Practical approach to the All-Plan programme. Interface. Key-board combinations. Key-board and mouse. Speedbars. Structure of carbon paper. Structure of project. Layers. Scaling. View windows. Simple interior in 2D. Working in 2D. Using main tools such as: line, circle, rectangles, copying, rotation, expanding, deleting. Role of point assistant. Simple interior on a plane. Entering own`s own interface configuration. Sketch of selected project storey in 2D (groundfloor). Drawing architecture elements. Libraries, symbols and styles. Necessity of handling sequence. Work methodology. Drawing in 3D. Three-dimensional drawing. Documentation for a detached house. Standard planes, user`s planes. Drawing walls, windows ports, door and roof ports. Staircase, types of stairs, main parameters, methodology of developing stairs. Window and door macros. Saving the documentation of a selected detached house project. Copying and correcting of some architectural elements. Building model in 3D. Cross-sections design, dimensioning, elevations development. Project saving. Digital model of a detached house surroundings.

**Main literature**

- Podręcznik All Plan. Nemetschek Polska. Warszawa 2005.

**Supplementary literature**

**Assessment**

class laboratory assignments

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Building constructions

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 3 with project

**Supervisor:** Kszysztof Gerlic, DSc.

**Objectives**

Different loads on constructional building elements, logic of construction.

**Prerequisites**

Passed Building mechanics and General building

**Subject`s topical content**

Basic information on constructional building. Loads distribution and constructional systems – classification. Materials properties and their impact on the load acceptance. Foundations – building positioning. Wall construction and load distribution. Poles and supports. Wood and steel supported storeys. Monolithic and prefabricated storeys. Roof-tops. Wooden, steel, concrete roofs. Wooden and steel stairs. Concrete stairs. Multifloor buildings. Halls,

**Main literature**

Borusiewicz W.: Konstrukcje budowlane dla architektów. Arkady, Warszawa 1978,  
Lenkiewicz W., Pyrak S.: Konstrukcje domów jednorodzinnych i małych budynków. Arkady, Warszawa 1989,  
Pyrak S., Szulborski K.: Mechanika konstrukcji dla architektów, przykłady obliczeń. Arkady, Warszawa 1994

**Supplementary literature****Assessment**

test, exam

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Building constructions

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 3 with lecture

**Supervisor:** Kszysztof Gerlic, DSc.

### **Objectives**

Principles governing the shaping of spatial constructional systems, skills in logical building design.

### **Prerequisites**

Completed Building mechanics and General building

### **Subject`s topical content**

Topic-related projects

### **Main literature**

Borusiewicz W.: Konstrukcje budowlane dla architektów. Arkady, Warszawa 1978.

Siegel C.: Formy strukturalne w nowoczesnej architekturze. Arkady, Warszawa 1974.

Kolendowicz T.: Architektoniczne konstrukcje przestrzenne, Wydawnictwo Politechniki Wrocławskiej, Wrocław, 1976.

### **Supplementary literature**

### **Assessment**

tests and project

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Work place

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 3 with project

**Supervisor:** Kszysztof Gasidło, DSc.

### **Objectives**

Architectonic designing of industrial, handicraft and other services premises.

### **Prerequisites**

Basics of architectonic and general building designing

### **Subject`s topical content**

Historical review of industrial constructions, building types, industrial and services buildings, transportation and terrain urbanistics; production areas; socio-administative areas; types of offices; impact of industry services centres on other municipal functions; ergonomics – work environment; automation, computers, teleworking

### **Main literature**

Gawłowski T., Niezabitowska E. (red.) Projektowanie architektoniczne zakładów przemysłowych., Wyd. Politechniki Śląskiej 1990.

Mirski Z. Kształtowanie wnętrz produkcyjnych, Wyd. Arkady 1986

Szparkowski Z. Architektura współczesnej fabryki, Oficyna Wyd. Politechniki Warszawskiej, 1999

Złowodzki M.. O środowisku architektonicznym pracy biurowej, Wyd. Politechniki Krakowskiej 1992

### **Supplementary literature**

### **Assessment**

written test

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Work place

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 3 with lecture

**Supervisor:** Kszysztof Gasidło, DSc.

**Objectives**

Architectonic designing of industrial, handicraft and services areas.

**Prerequisites**

Basic skills in archetictonic designing

**Subject`s topical content**

Project classes focus on the architectonic concept of a small production unit located in an urban area. Conceptual development relative to some project problems. Final elevation and cross-section drawings, models.

**Main literature**

Gawłowski T., Niezabitowska E. (red.) Projektowanie architektoniczne zakładów przemysłowych., Wyd. Politechniki Śląskiej 1990.

Mirski Z. Kształtowanie wnętrz produkcyjnych, Wyd. Arkady 1986

Szparkowski Z. Architektura współczesnej fabryki, Oficyna Wyd. Politechniki Warszawskiej, 1999

Złowodzki M.. O środowisku architektonicznym pracy biurowej, Wyd. Politechniki Krakowskiej 1992

**Supplementary literature**

**Assessment**

Attendance, tests, project

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Housing I

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 5 with project

**Supervisor:** Bożena Hrynyszyn, DSc.

**Objectives**

Presentation of problems relating to housing of various type such as detached houses, semi-detached houses, terraced houses, atrium houses. Presentation of the process and methodology of designing. Presentation of detached houses and surroundings definitions. Presentation of principles of functional and spatial adaptation of detached houses premises. Presentation of latest trends in detached houses building, elevation technology and furnishing.

## **Prerequisites**

Completed subject of Modelling, Recreation and other obligatory project and building subjects.

## **Subject`s topical content**

Lectures cover issues connected with – building lot utilisation, - urban and architectonic prerequisites in detached houses architecture (definition of detached houses building, sunshine, functionality, transport systems, etc.), - aesthetic aspects of detached housing (identification with surroundings, immediate neighbourhood, housing estate, region, landscape and cultural environment). – natural environmental elements ( symbiosis, ecological energy saving architecture), - typology of detached housing, sociological aspects of housing, adapting houses for the disabled, - functional sectors of a house, their layout, relatedness and arrangement, - latest technologies in elevation construction and infrastructure of detached housing.

## **Main literature**

"Podręcznik projektowania architektoniczno - budowlanego" - P. i E. Neufert  
"Kształtowanie zespołów mieszkaniowych" - H. Adamczewska - Wejchert  
"Wykorzystanie energii w budownictwie jednorodzinym" - M. Wołoszyn  
"Słabe miejsca w budynkach" - praca zbiorowa tłum. L. Urban  
"Odległości w zabudowie i zagospodarowaniu terenu" - Wł. Korzeniewski  
"Odnawialne źródła energii w architekturze" - praca zbiorowa pod redakcją Adama Lisika  
"Budownictwo mieszkaniowe" - Wł. Korzeniewski  
"Budownictwo jednorodzinne" - W. Korzeniowski  
"Projekty niskiego intensywnego budownictwa mieszkaniowego" - K. Doniemińska  
"Ekologiczne miasta, osiedla, budynki" - A. Sumień  
"Single famili houses" - A. Mastaedi  
"Ten houses" - Miller/Hull Partnership i inne tomy wydawnictwa  
"Town houses" - A. Mastaedi  
"Słońce w architekturze" - M. Twarowski  
"Living spaces - Ecological Building and Desing" - T. Schmitz-Gunter, L. E. Abraham, T. A. Fisher  
„Green architecture" - James Wines  
"Prawo budowlane" - J. Siegień lub inny autor (aktualny stan prawny)  
Aktualne akty prawne i normatywy, w szczególności: Dz.U. nr 75, poz. 690 -  
Rozporządzenie Ministra Infrastruktury z dn. 12 kwietnia 2002 r. w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie, łącznie z Dz. U. nr 109, poz.  
Czasopisma: "Murator", "Architektura", "Architektura - murator", "Domus", "Baumaister", "Archiwolta", "Detail" (<http://www.detail.de>; E - Mail: [vertrieb@detail.de](mailto:vertrieb@detail.de)).

## **Supplementary literature**

### **Assessment**

Final written exam

### **Language**

Polish



**Institute :** Institute of Architecture

**Subject :** Housing I

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:**

**Semester :** Winter

**Semester of studies :** 3

**ECTS points:** 5 with lecture

**Supervisor:** Bożena Hrynyszyn, DSc.

### **Objectives**

Designing a detached house of a given type according to assumed terrain conditions. Presentation the problems connected with detached housing; one-family, semi-detached, terraced, atrium. Presenting the process and methodology of designing. Definition of detached housing and its surrounding elements. Detached housing planning and its constructional implications.

### **Prerequisites**

Completed subject of Modelling, Recreation and other obligatory project and building subjects.

### **Subject`s topical content**

Lectures cover issues connected with – building lot utilisation, - urban and architectonic prerequisites in detached houses architecture (definition of detached houses building, sunshine, functionality, transport systems, etc.), - aesthetic aspects of detached housing (identification with surroundings, immediate neighbourhood, housing estate, region, landscape and cultural environment). – natural environmental elements ( symbiosis, ecological energy saving architecture), - typology of detached housing, sociological aspects of housing, adapting houses for the disabled, - functional sectors of a house, their layout, relatedness and arrangement, - latest technologies in elevation construction and infrastructure of detached housing. Project scope – building lot arrangement in 1:500 scale. Storeys arrangement in 1:50 scale. Architectonic and building projection of the main storey in 1:50 scale. Architectonic and building elements scaled. Elevations. Colouring of elevations. Exterior view of the house. Interior views. A model in 1:100 scale

### **Main literature**

"Podręcznik projektowania architektoniczno - budowlanego" - P. i E. Neuffer

Kształtowanie zespołów mieszkaniowych" - H. Adamczewska - Wejchert

"Budownictwo mieszkaniowe" - Wł. Korzeniowski

"Budownictwo jednorodzinne" - W. Korzeniowski

"Słabe miejsca w budynkach" - praca zbiorowa tłum. L. Urban

"Odległości w zabudowie i zagospodarowaniu terenu" - Wł. Korzeniowski

"Prawo budowlane" - J. Siegień lub inny autor (aktualny stan prawny)

Aktualne akty prawne i normatywy, w szczególności: Dz.U. nr 75, poz. 690 -

Rozporządzenie Ministra Infrastruktury z dn. 12 kwietnia 2002 r. w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie, łącznie z Dz. U. nr 109, poz.

"Projekty niskiego intensywnego budownictwa mieszkaniowego" - K. Doniemirska

Czasopisma: "Murator", "Architektura", "Architektura - murator", "Domus", "Baumaister", "Archiwolta", "Detail" (<http://www.detail.de>; E - Mail: [vertrieb@detail.de](mailto:vertrieb@detail.de)).

## **Supplementary literature**

### **Assessment**

Project and the model of a detached house, assignments, attendance.

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Plastic arts  
**Subject code :**  
**Subject type:** elementary  
**Teaching form :**  
laboratory

**Level:**  
**Semester :** Winter  
**Semester of studies :** 3  
**ECTS points:** 2  
**Supervisor:** Ryszard Szymończyk, MA.

### **Objectives**

Developing artistic feeling, developing divergent thinking in artistic process. Acquiring manual skills enabling presentation on individual artistic concepts. Learning the principles and methods of graphics and painting in educational process.

### **Prerequisites**

none,

### **Subject`s topical content**

Space atation as an architectonic and mechanical object. Project of a company logo, e.g. that of architecture laboratory. Name and surname derived correlation od two letters. Creating a compact plastic form. Synthesis of the form. Architectonic detail – graphic sudy of classic forms. Analysis of shape, defining constructional lines necessary for establishing relationships between planes and angles. Value differentiating, materials features. Constructional-value study of a staircase. Defining perspectives. Light-shade modelling. Graphic study of sculpture. Defining proportions and form analysis. Linear and constructional drawing as a basis of value drawing.

### **Main literature**

### **Supplementary literature**

### **Assessment**

Work, attendance and artistic activity

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Theory of architecture  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**

**Semester:** Winter  
**Semester of studies:** 3  
**ECTS points:** 2  
**Supervisor:** Jacek Włodarczyk, prof.

**Objectives**

Presenting main concepts related to architecture as a form of creativity. Principles of logical and pragmatic creation and formation of space (part III).

**Prerequisites**

Completed Theory of architecture, sem. 2

**Subject`s topical content**

Architecture of public utilities, work place and recreation. Places of trade, administration and business. Theatres, cinemas, churches, sports-halls. Transport related constructions such stations and ports. Industrial objects. Municipal objects such as hospitals, parks, etc.

**Main literature**

Neufert. Podręcznik projektowania architektoniczno-budowlanego. Arkady, Warszawa. 1996.  
Izenour G. C. The Theater Design. Mc Graw - Hill Book Company, New York, 1977.

**Supplementary literature**

**Assessment**

Activity, final test and exam

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Theory of urbanistics and ruralistics

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 3

**ECTS points:** 2

**Supervisor:** Krzysztof Gasidło, DSc.

**Objectives**

Knowledge on fundamentals of municipal and rural settlement, which has a practical application in architectonic and urban designing and space planning

**Prerequisites**

Fundamental knowledge of physical and economic geography at a secondary-school level

**Subject`s topical content**

Human settlement in natural surroundings (urban physiogeography): lithosphere, hydrosphere, atmosphere – climatic factor in urbanistics and ruralistics; biotic environment, ecology of settlement systems; economic bases of towns and villages, regional differentiation of economy, land policy; social differentiation between towns and villages; processes of development and transformation of settlement areas – theories of settlement distribution; management of urban areas, operational urbanistics.

**Main literature**

Chmielewski J.M: Teoria urbanistyki w projektowaniu urbanistycznym, Oficyna Wyd. Politechniki Warszawskiej, Warszawa 2001  
Słodczyk J: Przestrzeń miasta i jej przeobrażenia, Wyd. Uniw. Opolskiego, Opole 2003  
Szponar A: Fizjografia urbanistyczna, Wyd. Nauk. PWN, Warszawa 2003  
Jałowiecki B., Szczepański M: Miasto i przestrzeń w perspektywie socjologicznej, Wyd. Nauk. SCHOLAR, Warszawa 2002

**Supplementary literature****Assessment**

Final written test

**Language**

Polish

**SEMESTER IV**

**Institute :** Institute of Architecture  
**Subject :** General building and materials science  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Project

**Level:**  
**Semester:** Summer  
**Semester of studies:** 4  
**ECTS points:** 2  
**Supervisor:** Tomasz Malczyk, DSc.

**Objectives**  
Designing constructional elements of building systems; description and dimensioning

**Prerequisites**

Fundamental knowledge of mechanics, building materials science, general building and engineering drawing.

### **Subject`s topical content**

The classes are devoted to project design of a detached house in fine-dimensional technique. The project will include, among others, drawings of floor beams and rafter framings. Also, the project will include other building elements and their description

### **Main literature**

Moj E., Śliwiński M. I inni: Podstawy budownictwa, T. 1 i 2, Politechnika Krakowska, Kraków, 2000r  
Parczewski W., Wnuk Z.: Elementy robót wykończeniowych, Politechnika Warszawska, Warszawa, 1998r  
Mielczarek Z.: Nowoczesne konstrukcje w budownictwie ogólnym, Arkady, Warszawa, 2001r  
Praca zbiorowa: Nowy poradnik majstra budowlanego, Arkady, Warszawa  
Neufert E.: Podręcznik projektowania architektoniczno-budowlanego, Arkady, Warszawa  
Dąbrowski O., Kolendowicz T.: Poradnik inżyniera i technika budowlanego, Arkady, Warszawa

### **Supplementary literature**

### **Assessment**

project

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Building physics

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 3 with project

**Supervisor:** Tomasz Malczyk, DSc.

### **Objectives**

Presenting main concepts concerning building physics and their application in architectonic-building projects

### **Prerequisites**

Fundamentals of engineering drawing and general building

### **Subject`s topical content**

Issues connected with building physics, thermal acoustic protection, microclimate fo interiors, technology of energy-saving and pro-ecological constructions. Advanced aspects of building physics and building thermal protection.

**Main literature**

J.A. Pogorzelski "Fizyka cieplna budowli", PWN, Warszawa 1976  
W. Płonski, J.A. Pogorzelski "Fizyka budowli", Arkady, Warszawa 1979  
W.N. Bogosławski "Fizyka budowli", Arkady, Warszawa 1975  
W.N. Bogosławski "Procesy cieplne i wilgotnościowe w budynkach", Arkady, W-wa 1985  
B. Staniszewski "Wymiana ciepła. Podstawy teoretyczne" PWN, Warszawa 1980  
B. Brinkworth "Energia słoneczna w służbie człowieka", Biblioteka problemów, PWN, 1979  
J. Mikoś . "Budownictwo ekologiczne" Wyd. Politechniki Śląskiej, Gliwice 1996  
S. Wiśniewski "Wymiana ciepła" PWN, Warszawa 1979  
W. Płóński "Buduję ciepły dom", wyd.2 popr, Arkady, Warszawa 1991

**Supplementary literature****Assessment**

written exam

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Building physics

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Project

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 3 with lecture

**Supervisor:** Tomasz Malczyk, DSc.

**Objectives**

Presenting main concepts concerning building physics and their application in architectonic-building projects

**Prerequisites**

Fundamentals of engineering drawing and general building

**Subject`s topical content**

The project includes indispensable calculations in building physics for walls, floors, ceilings and attics and some other constructional elements

**Main literature**

J.A. Pogorzelski "Fizyka cieplna budowli", PWN, Warszawa 1976



W. Płonski, J.A. Pogorzelski "Fizyka budowli", Arkady, Warszawa 1979  
W.N. Bogosławski "Fizyka budowli", Arkady, Warszawa 1975  
W.N. Bogosławski "Procesy cieplne i wilgotnościowe w budynkach", Arkady, W-wa 1985  
B. Staniszewski "Wymiana ciepła. Podstawy teoretyczne" PWN, Warszawa 1980  
B. Brinkworth "Energia słoneczna w służbie człowieka", Biblioteka problemów, PWN, 1979  
J. Mikoś . "Budownictwo ekologiczne" Wyd. Politechniki Śląskiej, Gliwice 1996  
S. Wiśniewski "Wymiana ciepła" PWN, Warszawa 1979  
W. Płóński "Buduję ciepły dom", wyd.2 popr, Arkady, Warszawa 1991

### **Supplementary literature**

#### **Assessment**

project

#### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** History of Polish architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 2

**Supervisor:** Zygmunt Kalinowski, DSc.

### **Objectives**

#### **Prerequisites**

#### **Subject`s topical content**

History of stone and brick architecture in Poland since the beginnings of Polish state up to the end of XV c. The topics and the number of hours for the 2<sup>nd</sup> year (in brackets is the number of hours for extramural students) 1. Beginnings of stone architecture in Poland (palladium with chapel and rotunda) 5 (3). 2. First Romanesque cathedrals (Poznań, Gniezno, Karaków) – 5 (3) 3 hrs. Adoption of Otton`s patterns in XII c (Tum at Łęczycza, Kruszwica, Strzelno) – 5 (3) 4 hrs. Hall churches in XI – XIII c. and Cistercian architecture in Poland – 5 (3) 5hrs. Polish Gothic cathedrals (Poznań, Gniezno, Wrocław, Kamień Pomorski) – 5 (3) 6 hrs. Late-Gothic hall churches and town-halls in Poland – 5 (3).

#### **Main literature**

A. Miłobędzki, Zarys dziejów architektury w Polsce, Warszawa 1988, rozdz. 1 i 2.

J. Kębłowski, Dzieje sztuki polskiej, Arkady, Warszawa 1987, s. 9-85.  
Dzieje sztuki polskiej, red. J. Chłap-Nowakowa, M. Kuś, J. Marcinek, wyd. Kluszczyński, Kraków [2003 ?] s. 328-379.  
W. Krassowski, Dzieje budownictwa i architektury na ziemiach polskich, t. 1 i 2, Warszawa 1989/90.

### **Supplementary literature**

#### **Assessment**

Attendance

#### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Building constructions

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 4 with project

**Supervisor:** Tomasz Malczyk, DSc.

#### **Objectives**

Discussing main elements of constructional systems its components and function with regard to materials used.

#### **Prerequisites**

Fundamentals of engineering drawing, mechanics, strength and general building

#### **Subject`s topical content**

Types of building constructions: wooden, brick and steel. Basics of dimensioning and constructing building elements.

#### **Main literature**

Gerald E. Sherwood, P.E. Robert C. Stroh, Ph.D. Budowa szkieletowego domu drewnianego Wydawnictwo Murator

Rob Thallon : Od piwnicy aż po dach, Wydawnictwo Murator, Warszawa

Markiewicz P.: Vademecum Projektanta. Prezentacja nowoczesnych technologii budowlanych, Wydawnictwo Archiplus, Kraków

Markiewicz P.: Vademecum Projektanta. Projekt jednego domu

Szymon Pałkowski: Konstrukcje stalowe Wydawnictwo Naukowe PWN

Włodzimierz Starosolski: Konstrukcje żelbetowe. T. 1-2 Wydawnictwo Naukowe PWN Warszawa, 2003 r.

Borusiewicz W.: Konstrukcje budowlane dla architektów. Arkady, Warszawa 1978,

Lenkiewicz W., Pyrak S.: Konstrukcje domów jednorodzinnych i małych budynków. Arkady, Warszawa 1989.

### **Supplementary literature**

#### **Assessment**

written exam

#### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Building constructions

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

#### **Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 4 with lecture

**Supervisor:** Tomasz Malczyk, DSc.

#### **Objectives**

Basics of constructional designing

#### **Prerequisites**

Fundamentals of engineering drawing, mechanics, strength and general building

#### **Subject`s topical content**

Types of building constructions: wooden, brick and steel. Basics of dimensioning and constructing building elements.

#### **Main literature**

Rob Thallon : Od piwnicy aż po dach, Wydawnictwo Murator, Warszawa

Markiewicz P.: Vademecum Projektanta. Prezentacja nowoczesnych technologii budowlanych, Wydawnictwo Archiplus, Kraków

Markiewicz P.: Vademecum Projektanta. Projekt jednego domu

Szymon Pałkowski: Konstrukcje stalowe Wydawnictwo Naukowe PWN 2001 r.

Lenkiewicz W., Pyrak S.: Konstrukcje domów jednorodzinnych i małych budynków. Arkady, Warszawa 1989,

Grabiec K., Bogucka J., Grabiec T.: OBLICZANIE PRZEKROJÓW W ELEMENTACH BETONOWYCH i żelbetowych, Arkady, Warszawa

Bródka, M. Brodniewicz Konstrukcje stalowe z rur, Arkady, Warszawa

Jan Żmuda Podstawy Projektowania Konstrukcji Metalowych, Arkady, Warszawa

### **Supplementary literature**

#### **Assessment**

project

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Plastic arts

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Laboratory

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 2

**Supervisor:** Ryszard Szymończyk, MA.

**Objectives**

Developing artistic feeling, developing divergent thinking in artistic process. Acquiring manual skills enabling presentation on individual artistic concepts. Learning the principles and methods of graphics and painting in educational process.

**Prerequisites**

none,

**Subject`s topical content**

Perspective drawing of a car. Linear definition of a vehicle body proportion, characteristic elements, technical dimensions, cross-cuts. Drawing study of traffic and railway infrastructure. Bridge and viaduct. Issues concerning proportion and dynamics of constructional system. Legendary architecture – Babel`s Tower – constructional elements in low horizon and three points of convergence. Municipal building with high horizon. Bird`s eye view perspective. Defining horizon line, convergence points and urban layout. Sculpture composition. Juxtaposition of angular and oval elements. Clay modelling. Defining directional and optical weights of a composition. Form defining by means of fingers and other tools.

**Main literature**

**Supplementary literature**

**Assessment**

Work, attendance and artistic activity

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Services design

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 4 with lecture

**Supervisor:** Wiktor Jackiewicz, prof.

### **Objectives**

Architecture of public utilities. Supervised team work.

### **Prerequisites**

Completed „ Descriptive geometry” subject, spatial drawing, sketching, completed „Building mechanics” subject.

### **Subject`s topical content**

A project of small service utility.

### **Main literature**

Neufert "Podręcznik projektowania architektonicznego"

W. Jackiewicz "Architektura nie tylko teatru" 1985

F.A.Carver "Architektura XX w. "

"Atlas architektury współczesnej" Barcelona Hiszpania 2000

W. Jackiewicz "Architektura organiczna a modernizm" 2004

### **Supplementary literature**

### **Assessment**

attendance, activity, project

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Services design  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**  
**Semester:** Summer  
**Semester of studies:** 4  
**ECTS points:** 4 with project  
**Supervisor:** Wiktor Jackiewicz, prof.

### **Objectives**

Designing public utilities. New trends in small services utilities design. Project in supervised team groups.

### **Prerequisites**

Completed „ Descriptive geometry” subject, spatial drawing, sketching, completed „Building mechanics” subject.

### **Subject`s topical content**

Principles of designing public utilities buildings - small service. Standards of sizing, coefficients, and interrelatedness of function, construction, technology and form. Practical implications in designing presented in examples. Supervised small services utility project.

### **Main literature**

Neufert "Podręcznik projektowania architektonicznego"  
W. Jackiewicz "Architektura teatralna" 1984  
W. Jackiewicz "Architektura nie tylko teatru" 1985  
F.A.Carver "Architektura XX w. "  
"Atlas architektury współczesnej" Barcelona Hiszpania 2000  
W. Jackiewicz "Przekształcenie architektury i urbanistyki" 2002  
W. Jackiewicz "Architektura organiczna a modernizm" 2004

### **Supplementary literature**

### **Assessment**

Graphic and textual tests. Project and exam.

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Theory of architecture  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**  
**Semester:** Summer

**Semester of studies:** 4  
**ECTS points:** 2  
**Supervisor:** Jacek Włodarczk, prof.

**Objectives**

Presenting main assumptions in architectonic praxis. Principles of logical and pragmatic space arrangement (part IV).

**Prerequisites**

Completed Theory of architecture, sem. 3

**Subject`s topical content**

Selected aspects of the theory of architecture. Constructional systems as an inspiration for architectonic creativity. Low-cost housing. Spatial-functional variation, housing development. Housing needs of the elderly people (gerontoarchitecture). Space planning for the disabled. Social premises, prognosis and architectural vistas.

**Main literature**

Włodarczyk J. Projektowanie mieszkań dla osób starszych. Politechnika Śląska Gliwice, 1987.

Włodarczyk J. Czynniki czasu w kształtowaniu nowych zespołów mieszkaniowych. Politechnika Śląska Gliwice, 1991.

Włodarczyk J. Technika jako czynnik inspirujący w architekturze. Politechnika Śląska Gliwice, 2004.

**Supplementary literature**

**Assessment**

Activity, written test, exam.

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Interiors

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 4 with project

**Supervisor:** Wiktor Jackiewicz, prof.

**Objectives**

Interiors design – principles and formal implications

**Prerequisites**

Completed architectonic design course sem. 3, year I, and the course of plastic design and fundamentals of composition.

**Subject`s topical content**

Historical review of interiors architecture from the ancient, middle-ages, till modern times. Interiors of work-places, collective and individual housing, architecture of public utilities. Principles of interior modelling. Systems and anfilades. New and modernised, expanded interiors. Standards and their impact on interior architecture. Genesis of form changes of various interiors.

**Main literature**

Neufert "Podręcznik projektowania architektonicznego"  
F.A.Carver "Atlas architektury współczesnej. "  
W. Jackiewicz "Architektura organiczna a modernizm" 2004  
J.Pile "Historia wnętrz" Arkady

**Supplementary literature**

**Assessment**

graphic and textual tests, free-hand drawing

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Interiors

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 4 with lecture

**Supervisor:** Wiktor Jackiewicz, prof.

**Objectives**

Interiors design – principles and formal implications

**Prerequisites**

Completed architectonic design course sem. 3, year I, and the course of plastic design and fundamentals of composition.



**Subject`s topical content**

Project of the object designed during „Small service“ course

**Main literature**

Neufert "Podręcznik projektowania architektonicznego"

F.A.Carver "Atlas architektury współczesnej. "

W. Jackiewicz "Architektura organiczna a modernizm" 2004

J.Pile "Historia wnętrz" Arkady

**Supplementary literature****Assessment**

attendance, activity, project

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Physical education / Sports activities

**Subject code :**

**Subject type:** general

**Teaching form :**

Classes

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 1

**Supervisor:** Marcin Dykta, MA.

**Objectives**

Skills in playing volleyball and football. Recreational values. Self-control. Co-operation in pairs. Self-improvement. Individual predispositions. Rules of the a/m games.

**Prerequisites**

basic knowledge of volleyball and football

**Subject`s topical content**

Skills in controlling a ball and manoeuvring. Defensive and offensive action. Ball reception and passing. Elements of game tactics. Individual and team performance. Team attack and defence.

**Main literature**

Kuglawczyk R. 1994 "Mini piłka siatkowa". Warszawa  
Papageorgiou A. Spitzley W. 1999 "Piłka siatkowa. Podręcznik nauczania podstawowego."  
Wrocław  
Uzarowicz J. 1998 "Siatkówka . Co jest grane?" Kraków  
Ćmikiewicz L. "Praktyczna szkoła piłki nożnej"  
Harvey Gill " Praktyczna szkoła piłki nożnej"

**Supplementary literature****Assessment**

Attendance and activity – point assessment

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Housing complexes

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 1 with project

**Supervisor:** Konrad Dobrowolski, DSc.

**Objectives**

Introduction to designing architectonic complexes constituting main units of municipal and rural housing. Terrain shaping and its impact on housing complexes development. Hierarchical spatial structure of housing complexes. One-family housing, multi-family housing, housing estates. Project of one-family and multi-family housing complex.

**Prerequisites**

none

**Subject`s topical content**

Lecture syllabus, preliminary definition of terms and concepts, main and supplementary literature. Housing areas. Structure of housing areas. Outdoors classes (gathering materials for reports). Terrain balance and coefficients of its utilisation. Factors pertinent to functional-spatial shaping of housing units. Main services in housing areas. Housing estate transport and its relatedness with municipal transport. Housing estate and city greenery systems. Elements of small architecture in housing areas. Analysis of selected conceptual solutions in Poland and elsewhere.

**Main literature**

Kształtowanie zespołów mieszkaniowych, H. Adamczewska-Wejhert, W-wa, Arkady 1985.  
Komunikacja na terenach mieszkaniowych, H. Jurkowski, Z. Woroszczuk, W-wa, ZWCRS 1972.  
Podręcznik projektowania architektoniczno-budowlanego, E. Neufert, W-wa, Arkady 1980  
Elementy kompozycji urbanistycznej, K. Wejhert, W-wa, Arkady 1974  
Samochód w śródmieściu, P. Olszewski, W. Suchorzewski, WKŁ W-wa, 1983  
Parkingi w miastach, J. Dumnicki, J. Kreczmer, L. Remisz WKŁ W-wa  
Inżynieria ruchu, S. Datka, W. Suchorzewski, M. Tracz, WKŁ W-wa  
Wytyczne projektowania ulic

**Supplementary literature****Assessment**

Final test, individual report

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Housing complexes

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:**

**Semester:** Summer

**Semester of studies:** 4

**ECTS points:** 4 with lecture

**Supervisor:** Konrad Dobrowolski, DSc.

**Objectives**

High-tech municipal constructions. Assumptions of municipal areas designing.  
Functionality of housing complexes.

**Prerequisites**

Transport systems. Space planning.

**Subject`s topical content**

Functional adaptability of housing complexes.

**Main literature**

Niska intensywna zabudowa mieszkaniowa, Chmielewski Jan Maciej, Katedra Urbanistyki i Gospodarki Przestrzennej Wydziału Architektury Politechniki Warszawskiej, W-wa 1996  
Teoria urbanistyki w projektowaniu i planowaniu miast, Oficyna Wydawnicza Politechniki Warszawskiej, W-wa 2001  
Planowanie miast i osiedli, PWN, W-wa 1970  
Kształtowanie zespołów zabudowy mieszkaniowej, Hanna Adamczewska-Wejhert, Arkady, Warszawa 1987

**Supplementary literature****Assessment**

Assignments, report.

**Language**  
Polish

**SEMESTER V**

**Institute :** Institute of Architecture  
**Subject :** Landscape architecture and greenery areas  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Project

**Level:**  
**Semester:** Winter  
**Semester of studies:** 5  
**ECTS points:** 3  
**Supervisor:** Wiesław Strabel, DSc.

### **Objectives**

Developing skills in creative designing of landscape and green areas, in finding links existing between the actual terrain its location and the surroundings which entails transport problems. Developing skills in setting up an urbanisation programme which would account for landscape values. The student also develops workshop skills in drawing.

### **Prerequisites**

Fundamentals of urbanistics and ruralistics, theory of architecture

### **Subject`s topical content**

Landscape project for a selected urban situation. Variant urban environment: 1) landscape of internal greenery areas in building estates which include playgrounds, relaxation areas, etc. 2) landscape of municipal squares (market-square with its historical elements), 3) architecture of municipal park and other large municipal areas. Problems: develop a programme of urbanisation, revitalisation of open areas and their integration urbanised areas. The conceptual programme should include: 1) state of urbanisation, greenery values, 2) analysis of existing urban elements, 3) functional-spatial programme and its description, 4) integration with adjacent areas, 5) adaptation or removal of green areas, 6) ways of adapting green areas, 7) assessment of landscape values, 8) transportation systems, 9) overall urbanisation plan.

### **Main literature**

Architektura krajobrazu. J.Bogdanowski, M. Łuczyńska-Bruzda, Z. Nowak. Warszawa 1973. PWN.

Landschaftsarchitekten (Landscape Architecture in Germany) Tom: I, II, III. Die Deutsche

Bibliothek - CIP- Einheitsaufnahme. Verlag H.M. Nelte, 1997 (1), 1998 (2), 2003 (3).

Czasopisma specjalistyczne: kwartalnik: Architektura krajobrazu, miesięcznik: Garten u. Landschaft,

### **Supplementary literature**

### **Assessment**

Committee assessment (2 supervisors) of the project,  
Assessment of project clauses (min. 2) made during classes,  
Assessment work advancement

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Modern architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 5

**ECTS points:** 2

**Supervisor:** Wiktor Jackiewicz, prof.

### **Objectives**

Giving information on the architecture of 1900-2000, the end of the XIX c., in pweriods of 1918-1939, 1945-1970, 1970-2000. Main architects and their achievements.

### **Prerequisites**

Completed subjects of „History of general architecture” and „History of Polish architecture”.

### **Subject`s topical content**

Architecture of periods 1918-1939, 1945-1970, 1970-2000. Main information on constructivism, modernism, development of architecture and urbanisation. Achievements of main architects. Changes in architecture and urbanistics in practice and theory.

### **Main literature**

Wolfgang Amsonleit "Architekci europejscy" Verlag Taschen Koln

Le Corbusier "Modulor I i II" Cellaion Ascoral Bologne

Peter Gossler, Gabriele Leuthauser "Architektura XXw" Verlag Taschen Koln

Bolesław Szmidt "Ład przestrzeni" PIW W-wa

Wiktor Jackiewicz "Architektura organiczna a modernizm" Cezar i Edex

Bruce Brookes Pfeiffer "Frank Lloyd Wright" Verlag Taschen Koln

Peter Gossler, Gabriele Leuthauser "Alvar Aalto" Verlag Taschen Koln

Benedikt Taschen "Mies van der Rohe" Verlag Taschen Koln

Rene Borgonien "Kattenbroek" Uitgrverij 010 Rotterdam

De Horst Hosterveg "Flevoland" Facts and Figures

### **Supplementary literature**

### **Assessment**

Graphic and textual tests. Final exam

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Ecology, environmental protection

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 5

**ECTS points:** 2

**Supervisor:** Bogusław Szuba, DSc.

**Objectives**

Introducing problems of ecological urbanisation. Ecology versus architecture and urbanisation.

**Prerequisites**

Secondary school knowledge of biology

**Subject`s topical content**

Features of ecological environment. Natural and modified environment. Main principles of creating environment with ecological features. Energy-saving architectonic structures. Media and natural environment. Heating and air-conditioning powered by renewable sources of energy. Problems of waste disposal and utilisation. Biological and mechanical waste utilisation. Fumes emission in the air.. Natural and technical means limiting emission. Proecological policy in urban planning. Protection of air, water, soil and landscape; protection against noise emission and improper waste disposal. Transport and ecology. Degraded and protected areas in Poland. Systems of rational exploitation of space, energy sources, materials in architecture and urbanistics.

**Main literature**

ARCHITEKT w procesie tworzenia harmonijnego środowiska / Elżbieta D. Ryńska. - Warszawa : Oficyna Wydawnicza Politechniki Warszawskiej, 2004

BUDOWNICTWO ekologiczne / Jan Mikoś. - Wyd. 2 zm. i rozsz.. - Gliwice : Wydaw. Politechniki Śląskiej, 2000. - 493, [2] s.:

EKOLOGIA / Aulay Mackenzie, Andy S. Ball, Sonia R. Virdee; tł. Michał Kozakiewicz, Anna Kozakiewicz, Krzysztof Dmowski. - dodr.. - Warszawa : Wydaw. Naukowe PWN, 2002.

EKOLOGIA z ochroną środowiska : przewodnik / Ewa Pyłka-Gutowska. - Wyd. 6 zm. - Warszawa : Wydaw. Oświata, 2004.

INŻYNIERIA ekologiczna w budownictwie wodnym i ziemnym / Wolf Begemann, Hugo Meinhard Schiechl; tł. z niem. Sławomir Patlewicz. - Warszawa : Arkady, 1999

KSZTAŁTOWANIE zdrowego środowiska mieszkaniowego : wybrane zagadnienia / Grażyna Schneider-Skalska; Politechnika Krakowska im. Tadeusza Kościuszki. - Kraków : Wydaw. Politechniki Krakowskiej, 2004.

OCHRONA środowiska / Jan Boć, Elżbieta Samborska-Boć, Konrad Nowacki. - Wrocław : Kolonia, 2000.

OCHRONA środowiska : problemy społeczne, ekonomiczne i prawne / Kazimierz Górka, Bazyli Poskrobko, Wojciech Radecki. - Wyd. 4 zm. - Warszawa : Polskie Wydaw. Ekonomiczne, 2001.

PROEKOLOGICZNE źródła energii odnawialnej / Witold M. Lewandowski. - Wyd. 2 popr. - Warszawa : Wydawnictwa Naukowo-Techniczne, 2002.

### **Supplementary literature**

#### **Assessment**

test

#### **Language**

Polish



**Institute :** Institute of Architecture  
**Subject :** History of Polish architecture  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**  
**Semester:** Winter  
**Semester of studies:** 5  
**ECTS points:** 3 with classes  
**Supervisor:** Zygmunt Kalinowski, DSc.

### **Objectives**

### **Prerequisites**

### **Subject`s topical content**

#### **Main literature**

W. Krassowski, Dzieje budownictwa i architektury na ziemiach polskich, t. 3,4,5  
Warszawa.  
A. Miłobędzki, Zarys dziejów architektury w Polsce, Warszawa 1988, rozdz. 4,5,6,7.  
J. Kębłowski, Dzieje sztuki polskiej, Arkady, Warszawa 1987, s. 86-198.  
Dwór polski w XIX w. Zjawisko historyczne i kulturowe. Materiały z II Seminarium  
zorganizowanego przez oddział kielecki SHS (Kielce 6-7. o4. 1989) Red. A. Gogut,  
Warszawa 1990

#### **Supplementary literature**

#### **Assessment**

Attendance

#### **Language**

polski

**Institute :** Institute of Architecture  
**Subject :** History of Polish architecture  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Classes  
**Level:**  
**Semester:** Winter  
**Semester of studies:** 5  
**ECTS points:** 3 with lecture  
**Supervisor:** Zygmunt Kalinowski, DSc.

### **Objectives**

Working on topics presented during the lectures: history of stone and brick architecture up to the end of XV c. History of Polish architecture since the beginnings of renaissance till the end of the XIX c.

### **Prerequisites**

none

### **Subject`s topical content**

Beginnings of stone architecture in Poland. First romanesque cathedrals (Poznań, Gniezno, Kraków). Adoption of Otton`s patterns in the XII c. (Tum at Łęczyca, Kruszwica, Strzelno). Hall churches in XI – XIII c. and Cistercian architecture in Poland. Polish Gothic cathedrals (Poznań, Gniezno, Wrocław, Kamień Pomorski, Late-Gothic hall churches and town-halls in Poland. Beginnings of renaissance architecture in Poland (rebuidling the Wawel and building Sigmuntus`s chapel). Tower – castel – tenement house (genesis of modern tenement housing architecture in Poland). First renaissance residences. Main trends in renaissance ecclesiastical architecture in Poland. Baroque churches. Palace architecture in Poland in mid XVII c. Mid-baroque churches. Manssions in Polish architecture. Gardens and parks in Poland from XV c. till the end of the XIX c. Classicistic architecture in Poland. Historicism in Polish architecture. Beginnings of modernism in Polish architecture.

### **Main literature**

A. Miłobędzki, Zarys dziejów architektury w Polsce, Warszawa 1988,  
J. Kęmbowski, Dzieje sztuki polskiej, Arkady, Warszawa 1987, s. 9-85.  
Dzieje sztuki polskiej, red. J. Chłap-Nowakowa, M. Kuś, J. Marcinek, wyd. Kluszczyński, Kraków [2003 ?] s. 328-379.  
J. Zachwatowicz, Architektura polska, Warszawa 1966.  
W. Krassowski, Dzieje budownictwa i architektury na ziemiach polskich, t. 1 i 2, Warszawa 1989/90.

### **Supplementary literature**

### **Assessment**

Attendance, report on selected topics

### **Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** History of culture and arts  
**Subject code :**  
**Subject type:** elementary  
**Teaching form :**  
Lecture

**Level:****Semester:** Winter**Semester of studies:** 5**ECTS points:** 2**Supervisor:** Monika Kamińska, DSc.**Objectives**

Giving knowledge on history of culture and arts

**Prerequisites**

Graded pass (written work)

**Subject`s topical content**

Lectures present the elements of the history culture and arts. Baroque style as an expression of secular and ecclesiastical authority. Reformed consciousness gives rise to classicism and romanticism. There are new trends at the end of XIX c. – impressionism and post-impressionism, and before World War I – cubism, dadaism, abstractionism, expressionism, surrealism. Modern art after World War II.

**Main literature**

P. Meyer Historia architektury europejskiej tom II W-wa 1973  
M. Rzepińska Historia koloru w dziejach malarstwa europejskiego W L 1970,  
K. Estreicher Historia sztuki w zarysie W-wa 1979  
P. Lavedan Historia sztuki Ossolineum 1954,  
W. Tatarkiewicz Dzieje sześciu pojęć PWN 1976  
K. Zwolińska Mały słownik terminów plastycznych WP 1974  
N. Pevsner Historia architektury europejskiej. W AiF 1976  
CH. Jencks Ruch nowoczesny w architekturze W AiF 1987  
A. Kotula, P. Krakowski Kronika nowej sztuki W-wa 1966

**Supplementary literature****Assessment**

written tests.

**Language**

polski

**Institute :** Institute of Architecture**Subject :** History of urbanistics**Subject code :****Subject type:** faculty**Teaching form :**

Lecture

**Level:****Semester:** Winter**Semester of studies:** 5**ECTS points:** 3 with classes**Supervisor:** Piotr Patoczka, prof.**Objectives**

General knowledge on urbanisation of towns, cultural elements and their place in modern urban structures

**Prerequisites**

Elements of urbanistics and composition; skills in town`s plan reading

**Subject`s topical content**

Model of town`s macrocomposition, squares, streets, walls, gates, fortifications, houses, old town and its urban conflicts; new town and its housing estates; Cracow – mosaic of landscapes.

**Main literature**

Wróbel P., Historia urbanistyki, Warszawa 1960.

**Supplementary literature**

**Assessment**

Essay – „my town“, illustrations, photos, assignments

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** History of urbanistics

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Classes

**Level:**

**Semester:** Winter

**Semester of studies:** 5

**ECTS points:** 3 with lecture

**Supervisor:** Piotr Patoczka, prof.

**Objectives**

General knowledge on urbanisation of towns, cultural elements and their place in modern urban structures

**Prerequisites**

Elements of urbanistics and composition; skills in town`s plan reading

**Subject`s topical content**

Model of town`s macrocomposition, squares, streets, walls, gates, fortifications, houses, old town and its urban conflicts; new town and its housing estates; Cracow – mosaic of landscapes.

**Main literature**

Wróbel P., Historia urbanistyki, Warszawa 1960.

**Supplementary literature**

**Assessment**

Essay – „my town“, illustrations, photos, assignments

**Language**

Polish

**Institute :** **Institute** Architektury

**Subject :** Język angielski 1A

**Subject code :**

**Subject type:** ogólny

**Teaching form :**

Ćwiczenia

**Level:**

**Semester :** Winter

**Semester studiów :** 5

**ECTS points:** 2

**Supervisor:** mgr Mariusz Kowalski

**Objectives**

oppanowanie przez studentów języka angielskiego w stopniu umożliwiającym podstawową komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami zagadnień cywilizacyjno-kulturowych krajów anglojęzycznych. Ponadto studenci szkolą umiejętności słuchania, mówienia, czytania, pisania oraz stosowania gramatycznych aspektów języka na **Levelie** początkującym. Wprowadzenie słownictwa specjalistycznego zgodnego z kierunkiem studiów.

**Prerequisites**

brak,

**Subject`s topical content**

nazwy państw i narodowości, zawody, przedstawianie się, opisywanie wyglądu, dom, umeblowanie; czasownik 'to be', 'to have got', modalny - 'can', przyimki miejsca, konstrukcja - 'there is', 'there are', zaimki wskazujące, liczba mnoga rzeczowników, przedimki - 'a', 'an'

**Main literature**

Evans V., Dooley J..Enterprise 1.-podręcznik. Newbury: Express Publishing, 1998.  
Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press 1997  
Murphy R. Essential Grammar in Use. Cambridge University Press

**Supplementary literature**

Evans V., Dooley J..Enterprise 1.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 1.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

### **Assessment**

**Semester** kończy się sprawdzianem pisemnym, z którego wystawiana jest ocena

### **Language**

angielski; pomocniczo język polski

**Institute : Institute** Architektury

**Subject :** Język angielski 1B

**Subject code :**

**Subject type:** ogólny

**Teaching form :**

Ćwiczenia

**Level:**

**Semester : Winter**

**Semester studiów : 5**

**ECTS points: 2**

**Supervisor:** mgr Mariusz Kowalski

### **Objectives**

opanowanie przez studentów języka angielskiego w stopniu umożliwiającym podstawową komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami zagadnień cywilizacyjno-kulturowych krajów anglojęzycznych. Ponadto studenci szkolą umiejętności słuchania, mówienia, czytania, pisanie oraz stosowania gramatycznych aspektów języka na **Levelie** podstawowym. Wprowadzenie słownictwa specjalistycznego zgodnego z kierunkiem studiów.

### **Prerequisites**

znajomość języka angielskiego na **Levelie** początkującym,

### **Subject`s topical content**

opis miejsc, opisy ludzi - charakter i wygląd, czynności dnia, sklepy i zakupy, opisywanie przedmiotów, odczucia i reakcje; czasy - Present Simple, Present Continuous, Past Simple, Past Continuous, porównania, zwrot '-used to', przymiotniki, przysłówki

### **Main literature**

Evans V., Dooley J..Enterprise 2.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 2.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Olejnik D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press 1997

Murphy R. Essential Grammar in Use. Cambridge University Press

## **Supplementary literature**

### **Assessment**

**Semester** kończy się sprawdzianem pisemnym, z którego wystawiana jest ocena

### **Language**

angielski; pomocniczo język polski

**Institute : Institute** Architektury

**Subject :** Język angielski 1C

**Subject code :**

**Subject type:** ogólny

**Teaching form :**

Ćwiczenia

**Level:**

**Semester : Winter**

**Semester studiów : 5**

**ECTS points: 2**

**Supervisor:** mgr Mariusz Kowalski

### **Objectives**

oppanowanie przez studentów języka angielskiego w stopniu umożliwiającym komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami zagadnień cywilizacyjno-kulturowych krajów anglojęzycznych. Ponadto studenci szkolą umiejętności słuchania, mówienia, czytania, pisania oraz stosowania gramatycznych aspektów języka na **Levelie** średnio-zaawansowanym niskim. Wprowadzenie słownictwa specjalistycznego zgodnego z kierunkiem studiów.

### **Prerequisites**

znajomość języka angielskiego na **Levelie** podstawowym w zakresie leksyki, gramatyki i struktur komunikacyjnych,

### **Subject`s topical content**

opisy ludzi - wygląd i charakter, ubiory, zainteresowania, hobby, miejsce zamieszkania, opis pogody, przymiotniki opisujące miejsca, miejsca wakacyjne, udzielanie kierunków, rekomendacja, książki, zmysły, opisy zwierząt, ich miejsca zamieszkania i reguły panujące w ich świecie; czasy - Present Simple, Present Continuous, Present Perfect, Present Perfect Continuous, Past Simple, Past Continuous, Past Perfect, Past Perfect Continuous, przyimki miejsca, przedimek określony, przyczynowe zdania, czasowniki modalne, porównania

### **Main literature**

Evans V., Dooley J..Enterprise 3 .podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 3 .workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Olejniki D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.  
Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press 1997  
Murphy R. Essential Grammar in Use. Cambridge University Press

### **Supplementary literature**

#### **Assessment**

**Semester** kończy się sprawdzianem pisemnym, z którego wystawiana jest ocena

#### **Language**

angielski; pomocniczo język polski

**Institute :** **Institute** Architektury

**Subject :** Język angielski 1D

**Subject code :**

**Subject type:** ogólny

**Teaching form :**

Ćwiczenia

#### **Level:**

**Semester :** Winter

**Semester studiów :** 5

**ECTS points:** 2

**Supervisor:** mgr Mariusz Kowalski

#### **Objectives**

oppanowanie przez studentów języka angielskiego w stopniu umożliwiającym komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami zagadnień cywilizacyjno-kulturowych krajów anglojęzycznych. Ponadto studenci szkolą umiejętności słuchania, mówienia, czytania, pisania oraz stosowania gramatycznych aspektów języka na **Levelie** średnio-zaawansowanym. Wprowadzenie słownictwa specjalistycznego zgodnego z kierunkiem studiów.

#### **Prerequisites**

znajomość języka angielskiego na **Levelie** średnio - zaawansowanym niskim w zakresie leksyki, gramatyki i struktur komunikacyjnych,

#### **Subject`s topical content**

zawody, opisywanie ludzi - wygląd, charakter, pogoda, miejsca do zwiedzania, zakwaterowanie, rodzaje książek, zmysły, odczucia, reakcje; Present Simple, Present Continuous, 'too' 'enough', zaimki relatywne, czasy przeszłe, Present Perfect, Present Perfect Continuous, mowa zależna

#### **Main literature**

Evans V., Dooley J., Upstream Intermediate.-podręcznik. Newbury: Express Publishing, 2002.

Evans V., Dooley J., Upstream Intermediate workbook-ćwiczenia. Newbury: Express Publishing, 2002.

Olejniki D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford



University Press 1997  
Murphy R. Essential Grammar in Use. Cambridge University Press

## **Supplementary literature**

### **Assessment**

**Semester** kończy się sprawdzianem pisemnym, z którego wystawiana jest ocena

### **Language**

angielski; pomocniczo język polski

**Institute : Institute** Architektury

**Subject :** język niemiecki

**Subject code :**

**Subject type:** ogólny

**Teaching form :**

Laboratorium

**Level:**

**Semester : Winter**

**Semester studiów : 5**

**ECTS points: 2**

**Supervisor:** mgr Mirosław Grudzień

### **Objectives**

opanowanie przez studentów języka niemieckiego w stopniu umożliwiającym komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami krajoznawstwa niemieckiego obszaru językowego. Celem zajęć jest ponadto szkolenie umiejętności w zakresie słuchania, mówienia, czytania, pisania oraz rozwój kompetencji gramatycznej na **Levelie** podstawowym.

### **Prerequisites**

brak,

### **Subject`s topical content**

mówienie: przedstawienie siebie, rodziny i innej osoby (również prosty opis miejsca zamieszkania). Zakupy, wizyta u lekarza, w restauracji (złożenie zamówienia). Podawanie czasu. Umiejętność wyjaśnienia (Jak dojść do....) Umawianie się na spotkanie. Rozmowa telefoniczna. Nauka, praca, czas wolny. Plan dnia. czytanie: rozumienie prostych tekstów prasowych. Rozumienie broszur i ankiet informacyjnych. Rozumienie napisów i informacji, np. na dworcu lub na lotnisku. Pisanie: wypełnianie formularzy meldunkowych. Umiejętność pisania krótkich listów. Wprowadzenie do pisania tekstów użytkowych. materiał gramatyczny: I. czasownik. czasowniki mocne, słabe, rozdzielnie złożone, modalne, zwrotne, nieregularne; czasy: Präsens; tryby: oznajmujący, rozkazujący. Rekcja czasownika. Rzeczownik: rodzajnik określony, nieokreślony, brak rodzajnika. Odmiana rzeczownika przez przypadki. Przeczenie nicht, kein. Zaimek: osobowy, dzierżawczy, wskazujący. Przyimek: przyimki z Dativem, Akkusativem, Dativem lub Akkusativem. Przymiotnik: odmiana i stopniowanie. Zdania: zdania proste, twierdzące, pytające.

### **Main literature**

Jadwiga Śmiechowska, Deutsch für dich neu, Wydawnictwo neoGRAF  
Themen neu 1, Kursbuch , Max Hueber Verlag  
Themen neu 1, Arbeitsbuch, Arbeitsbuch, Max Hueber Verlag  
Langenscheidts Taschenwörterbuch Deutsch, Langenscheidt KG Berlin und München  
Karin Hall, Barbara Scheiner, Übungsgrammatik, Deutsch als Fremdsprache, Max Hueber Verlag

## **Supplementary literature**

### **Assessment**

**Semester** kończy się pisemnym sprawdzianem, na podstawie którego wystawiana jest ocena.

### **Language**

niemiecki, pomocniczo język polski

**Institute :** Institute of Architecture

**Subject :** Building constructions

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 5

**ECTS points:** 2

**Supervisor:** Kszysztof Gerlic, DSc.

### **Objectives**

Principles of modelling construction systems and building elements according to logic of construction

### **Prerequisites**

Passed Building mechanics and General building

### **Subject`s topical content**

Basic information on spatial structures. Multilayer spatial structures. Nodes of spatial structures. Rod-strand systems. Systems of high-rise buildings. Folded plate structures. Surface girders. Domes. Hyperbolic paraboloid. Membrane construction. Pneumatic constructions. Mobile constructions. Engineer constructions. Various author`s constructions

### **Main literature**

Borusiewicz W.: Konstrukcje budowlane dla architektów. Arkady, Warszawa 1978.  
Siegel C.: Formy strukturalne w nowoczesnej architekturze. Arkady, Warszawa 1974.  
Kolendowicz T.: Architektoniczne konstrukcje przestrzenne, Wydawnictwo Politechniki Wrocławskiej, Wrocław, 1976.

## **Supplementary literature**

### **Assessment**

test.

## Language

Polish

**Institute :** Institute of Architecture

**Subject :** Housing II

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 5

**ECTS points:** 5 with project

**Supervisor:** Beata Majerska - Pałubicka, DSc.

## Objectives

Designing housing estates buildings. Process and methodology of designing. Notions of flat, tenement house, community housing, functional-spatial structure of multi-family buildings. New trends in housing environment, technologies of building and furnishing.

## Prerequisites

Completed Housing I and other project classes

## Subject`s topical content

Lectures present problems connected with: urban and architectonic aspects of collective housing architecture. (definition of a housing unit, housing arrangement, sunshine factor, functionality, transportation, etc.), - housing space identification and the systems of spacing, housing and natural surroundings, typology of multi-family buildings, sociological implications, housing adjustments for the disabled, trends in building technologies, technical infrastructure of housing objects, limiting energy consumption, energy-saving architecture, elasticity in shaping functional-spatial systems in multi-family buildings.

## Main literature

H. Adamczewska-Wejchert - Kształtowanie zespołów mieszkaniowych, Arkady;  
E. Grandjean - Ergonomia mieszkania, Arkady 1978  
A. Grudziński, A. Płachcińska - Propozycje standardu mieszkaniowego w społecznej zabudowie czynszowej, **Institute** Gospodarki Mieszkaniowej, W-wa 1994;  
W. Korzeniewski - Poradnik projektanta budownictwa mieszkaniowego, Arkady;  
Z. Mieszkowski - Mieszkania. Elementy i zespoły. Pol. Krakowska, 1980  
E. Neufert - Poradnik projektowania architektoniczno-budowlanego, Arkady;  
Ch. Norbert-Schulz - Bycie, przestrzeń, architektura, Wyd. Murator, W-wa 2000  
P. Peters, R. Rosner - Małe zespoły mieszkaniowe, Arkady  
A. Sumień - Ekologiczne miasta, osiedla, budynki;  
K. Wejchert - Elementy kompozycji urbanistycznej, Arkady  
M.A. Wołoszyn - Wykorzystanie energii słonecznej w budownictwie jednorodzinym

praca zbiorowa - HOME, Feierabend, Berlin 2002  
Czasopisma branżowe - Architektura, A&B, Archivolta, Detail, Murator, Domus,  
Baumaister itd□.  
Prawo Budowlane oraz obowiązujące rozporządzenia, akty prawne i normy.

**Supplementary literature**

**Assessment**

Written exam – three selected topics

**Language**

Polish

**Institute :** Institute of Architecture  
**Subject :** Housing II  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Project  
**Level:**  
**Semester:** Winter  
**Semester of studies:** 5  
**ECTS points:** 5 with lecture  
**Supervisor:** Beata Majerska - Pałubicka, DSc.

### **Objectives**

Designing housing estates buildings. Process and methodology of designing. Multi-family buildings and housing types.

### **Prerequisites**

Completed Housing I and other project classes

### **Subject`s topical content**

During project classes the students will prepare a conceptual project of a multi-family block situated in a small housing estate. The project will account for various tenants`s needs. Preferred flat structure M2, M3, M5. Implementation of modern technologies. Project`s scope: Graphic part: Project of housing area urbanisation, 1:500 scale; Full elaboration of the concept of a multi-family building (projections, cross-sections, elevations, interior arrangement, 1:100 scale; Detailed elaboration of a selected flat with its interior arrangement, 1:50 scale; Axonometry of the building in accompanying surroundings, scale 1:100 or 1:200. Project formula: Spreadsheets (max. 4) of 50 x 70 cm. Techniques used – nonobligatory.

### **Main literature**

H. Adamczewska-Wejchert - Kształowanie zespołów mieszkaniowych, Arkady;  
E. Grandjean - Ergonomia mieszkania, Arkady 1978  
A. Grudziński, A. Płachcińska - Propozycje standardu mieszkaniowego w społecznej zabudowie czynszowej, **Institute** Gospodarki Mieszkaniowej, W-wa 1994;  
W. Korzeniewski - Poradnik projektanta budownictwa mieszkaniowego, Arkady;  
Z. Mieszkowski - Mieszkania. Elementy i zespoły. Pol. Krakowska, 1980  
E. Neufert - Poradnik projektowania architektoniczno-budowlanego, Arkady;  
Ch. Norbert-Schulz - Bycie, przestrzeń, architektura, Wyd. Murator, W-wa 2000  
P. Peters, R. Rosner - Małe zespoły mieszkaniowe, Arkady  
A. Sumień - Ekologiczne miasta, osiedla, budynki;  
K. Wejchert - Elementy kompozycji urbanistycznej, Arkady  
M.A. Wołoszyn - Wykorzystanie energii słonecznej w budownictwie jednorodzinym praca zbiorowa - HOME, Feierabend, Berlin 2002  
Czasopisma branżowe - Architektura, A&B, Archivolta, Detail, Murator, Domus, Baumaister itd.  
Prawo Budowlane oraz obowiązujące rozporządzenia, akty prawne i normy.

### **Supplementary literature**

### **Assessment**

Active participation. Reviews of projects

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject:** Plastic arts  
**Subject code:**  
**Subject type:** elementary  
**Teaching form:**  
Laboratory

**Level:**  
**Semester:** Winter  
**Semester of studies:** 5  
**ECTS points:** 2  
**Supervisor:** Ryszard Szymończyk, MA.

### **Objectives**

Developing artistic feeling, developing divergent thinking in artistic process. Using symbols  
Acquiring manual skills enabling presentation on individual artistic concepts.  
Learning the principles and methods of graphics and painting in educational process and future career.

### **Prerequisites**

none

### **Subject`s topical content**

Drawing people. Problem of proportion. Head module dimensioning, movement, perspectives` short-cuts. Human skeleton. Construction. Head module measuring. Problem of proportion, defining model`s direction and gestures. Project of the logo of "Nysa`s Festival of science". The problem of sign and symbol. Synthesis of forms – combining graphics and lettering. Information and identification elements. Project of the logo of "Nysa`s Festival of science" as a kind of advertisement.

### **Main literature**

### **Supplementary literature**

### **Assessment**

Class assignments, attendance and activity

### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Wychowanie fizyczne brak tego przedmiotu w diagramach

**Subject code :**

**Subject type:** general

**Teaching form :**

Classes

**Level:**

**Semester :** Winter  
**Semester of studies :** 5  
**ECTS points:** 1  
**Supervisor:** Marcin Dykta, MA

**Objectives**

Skills in playing volleyball and football. Recreational values. Self-control. Co-operation in pairs. Self-improvement. Individual predispositions. Rules of the a/m games.

**Prerequisites**

basic knowledge of volleyball and football

**Subject`s topical content**

Skills in controlling a ball and manoeuvring. Defensive and offensive action. Ball reception and passing. Elements of game tactics. Individual and team performance. Team attack and defence.

**Main literature**

Kuglawczyk R. 1994 "Mini piłka siatkowa". Warszawa  
Papageorgiou A. Spitzley W. 1999 "Piłka siatkowa. Podręcznik nauczania podstawowego." Wrocław  
Uzarowicz J. 1998 "Siatkówka . Co jest grane?" Kraków  
Harvey Gill " Praktyczna szkoła piłki nożnej"  
Ćmikiewicz L. "Praktyczna szkoła piłki nożnej"

**Supplementary literature**

**Assessment**

Attendance and activity – point assessment

**Language**

polski

**Institute :** Institute of Architecture

**Subject:** City complexes

**Subject code:**

**Subject type:** faculty

**Teaching form:**

Lecture

**Level:**

**Semester:** Winter

**Semester of studies:** 5

**ECTS points:** 4 with project

**Supervisor:** Piotr Patoczaka, DSc.

**Objectives**

Selected notions of function, construction and form of city complexes; comparing the structures; way of „entering“ the complexes.

**Prerequisites**

Basics of urbanistics and history of town`s development.

**Subject`s topical content**

Selected terms and their designations, axis and centre of town`s composition, main interiors and other minor interiors, similar inneriors and their arrangement, small town idea, trnaporation systems, river in town, greenery areas.

**Main literature**

Patoczka P., Bramy i ściany w krajobrazie.

**Supplementary literature**

**Assessment**

text report on selected topic

**Language**

Polish

**Institute :** Institute of Architecture

**Subject:** City complexes

**Subject code:**

**Subject type:** faculty

**Teaching form:**

Classes

**Level:**

**Semester:** Winter

**Semester of studies:** 5

**ECTS points:** 4 with lecture

**Supervisor:** Piotr Patoczaka, DSc.

**Objectives**

Selected notions of function, construction and form of city complexes; comparing the structures; way of „entering“ the complexes.



**Prerequisites**

Basics of urbanistics and history of town`s development.

**Subject`s topical content**

Selected terms and their designations, axis and centre of town`s composition, main interiors and other minor interiors, similar inneriors and their arrangement, small town idea, trnaporation systems, river in town, greenery areas.

**Main literature**

Patoczka P., Bramy i ściany w krajobrazie.

**Supplementary literature****Assessment**

text report on selected topic

**Language**

Polish

**SEMESTER VI**

**Institute :** Institute of Architecture

**Subject :** Modern architecture

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** summer

**Semester of studies:** 6

**ECTS points:** 2

**Supervisor:** Wiktor Jackiewicz, prof.

**Objectives**

Giving information on the architecture of 1900-2000, the end of the XIX c., in periods of 1918-1939, 1945-1970, 1970-2000. Main architects and their achievements.

**Prerequisites**

Completed subjects of „History of general architecture” and „History of Polish architecture”.

**Subject`s topical content**

Architecture of periods 1918-1939, 1945-1970, 1970-2000. Main information on constructivism, modernism, development of architecture and urbanisation. Achievements of main architects. Changes in architecture and urbanistics in practice and theory.

**Main literature**

Wolfgang Amsonerit "Architekci europejscy" Verlag Taschen Koln  
Le Corbusier "Modulor I i II" Cella Collection Ascoral Bologne  
Peter Gossler, Gabriele Leuthauser "Architektura XXw" Verlag Taschen Koln  
Bolesław Szmidt "Ład przestrzeni" PIW W-wa  
Wiktor Jackiewicz "Architektura organiczna a modernizm" Cezar i Edex  
Bruce Brookes Pfeiffer "Frank Lloyd Wright" Verlag Taschen Koln  
Peter Gossler, Gabriele Leuthauser "Alvar Aalto" Verlag Taschen Koln  
Benedikt Taschen "Mies van der Rohe" Verlag Taschen Koln  
Rene Borgonien "Kattenbroek" Uitgeverij 010 Rotterdam  
De Horst Hosterveg "Flevoland" Facts and Figures

**Supplementary literature****Assessment**

Graphic and textual tests. Written and graphic exam.

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** Building biocenosis

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester of studies:** 6

**ECTS points:** 2

**Supervisor:** Bogusław Szuba, DSc

**Objectives**

Introducing problems of ecological urbanisation. Ecology versus architecture and urbanisation.

**Prerequisites**

## Secondary school knowledge of biology

### **Subject`s topical content**

Building biocenosis. Analysis of the links between an architectonic object and its natural surroundings. Man`s spiritual and physical needs as subject of formulated environment. The architecture element and its harmony with natural surroundings: choosing location, construction and form of the object, materials, interior and exterior furnishings. Interaction of environment and an architectonic object. Energy parameters. Climate. Ecosystem. Examples of formulating ecological environment. Topics: objectives and scope of building biocenosis research and its relation with architecture and urbanistics. Man as a subject of formulated environment. Biocenotic implications regarding location of architectonic objects and urban complexes. Time, space, energy and matter in architecture. Elements of architecture and their harmony with natural surroundings: problem of localisation, building materials, external and internal furnishings. Contemporary Feng Shui reference in architecture. Housing areas and their energy parameters. Electromagnetism. Ecosystem. Examples of building based on renewable materials. Examples of energy-saving building. Anthroposophia. Holistic architecture.

### **Main literature**

- Radwanowski L., 1981: Biocenotyczne uwarunkowania lokalizacji obiektów budowlanych. Warszawa: Centralny Ośrodek informacji Budownictwa
- Ball A.S., Mackenzie A., Virdee S.R., 2002: Ekologia. Warszawa: PWN.
- Baranowski A., 1998: Projektowanie zrównoważone w architekturze. Gdańsk: Wyd. Politechniki Gdańskiej,
- Pęski Wojciech., 1999: Zarządzanie zrównoważonym rozwojem miast. Warszawa, Arkady.
- Ryńska E.D., 2004: Architekt e procesie tworzenia harmonijnego środowiska. Warszawa Oficyna Wydawnicza Politechniki Warszawskiej.
- Sumień T., Wegner-Sumień A., 1991: Ekologiczne miasta, osiedla, domy. Warszawa: Wyd. IGPIK.

### **Supplementary literature**

#### **Assessment**

test

#### **Language**

Polish

**Institute :** Institute of Architecture

**Subject :** History of urbanistics

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester of studies:** 6

**ECTS points:** 3 with classes

**Supervisor:** Piotr Patoczka, prof.

**Objectives:** introduction to sequence of historical epochs

**Prerequisites:** according to lecture material

**Subject`s topical content:** theoretical aspects of town`s planning. Also, the lectures are devoted to the history of urbanistics in Greece, Rome, Middle Ages, Renaissance up to the present times.

**Recommended literature:**

- Broniewski T. – Historia architektury dla wszystkich, Wrocław 1963
- Białostocki J. – Sztuka cenniejsza niż złoto, Warszawa 1972

**Supplementary literature**

**Teaching method:** multimedia assisted lecture

**Assessment**

attendance, final written test

**Language**

Polish

**Institute :** Institute of Architecture

**Subject :** History of urbanistics

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Classes

**Level:**

**Semester:** Summer

**Semester of studies:** 6

**ECTS points:** 3 with lecture

**Supervisor:** Piotr Patoczka, prof.

**Objectives:** introduction to sequence of historical epochs

**Prerequisites:** according to lecture material

**Subject`s topical content:** eight topics relative to various epoch to be selected, analysis of selected urbanistic solution to be illustrated by drawing: plans, cross-sections, views, axonometries presenting solids in space and their functions.

**Recommended literature:** -Broniewski T. – Historia architektury dla wszystkich, Wrocław 1963

- Białostocki J. – Sztuka cenniejsza niż złoto, Warszawa 1972

**Supplementary literature**

**Teaching method:** project

**Assessment**

eight sketches

**Language**

Polish

**Institute :** **Institute** Architektury

**Subject :** Język angielski 2A

**Subject code :**

**Subject type:** ogólny

**Teaching form :**

Ćwiczenia

**Level:**

**Semester :** Summer

**Semester studiów :** 6

**ECTS points:** 3

**Supervisor:** mgr Mariusz Kowalski

### **Objectives**

opanowanie przez studentów języka angielskiego w stopniu umożliwiającym podstawową komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami zagadnień cywilizacyjno-kulturowych krajów anglojęzycznych. Ponadto studenci szkolą umiejętności słuchania, mówienia, czytania, pisanie oraz stosowania gramatycznych aspektów języka na **Levelie** początkującym. Wprowadzenie słownictwa specjalistycznego zgodnego z kierunkiem studiów.

### **Prerequisites**

opanowanie struktur leksykalno-gramatycznych w stopniu umożliwiającym kontynuację kursu,

### **Subject`s topical content**

relacje w rodzinie, czynności wolnego czasu, codzienne zajęcia, godziny, opisywanie zwierząt, opisywanie pogody i klimatu, ubiorów; zaimki osobowe, dzierżawcze, czas teraźniejszy prosty - Present Simple, dopełniacz saxoński, przysłowki częstotliwości i czasu, nieregularna liczba mnoga rzeczowników, czas teraźniejszy ciągły - Present Continuous, porównanie Present Simple i Present Continuous

### **Main literature**

Evans V., Dooley J..Enterprise 1.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 1.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Olejnik D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford

University Press 1997  
Murphy R. Essential Grammar in Use. Cambridge University Press

### **Supplementary literature**

#### **Assessment**

**Semester** kończy się egzaminem obejmującym materiał z dwóch **Semesterów**

#### **Language**

angielski; pomocniczo język polski

**Institute** : **Institute** Architektury

**Subject** : Język angielski 2B

**Subject code** :

**Subject type**: ogólny

**Teaching form** :

Ćwiczenia

**Level**:

**Semester** : **Summer**

**Semester studiów** : 6

**ECTS points**: 3

**Supervisor**: mgr Mariusz Kowalski

#### **Objectives**

opanowanie przez studentów języka angielskiego w stopniu umożliwiającym podstawową komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami zagadnień cywilizacyjno-kulturowych krajów anglojęzycznych. Ponadto studenci szkolą umiejętności słuchania, mówienia, czytania, pisanie oraz stosowania gramatycznych aspektów języka na **Levelie** podstawowym. Wprowadzenie słownictwa specjalistycznego zgodnego z kierunkiem studiów.

#### **Prerequisites**

znajomość języka angielskiego na **Levelie** początkującym,

#### **Subject`s topical content**

zawody, plany na przyszłość, wakacje, jedzenie, picie, restauracja, zdrowie, choroby, wypadki, doświadczenia życiowe, odczucia, udzielanie porad, prośby, propozycje, akceptacja, odmowa, prośba o udzielenie porad, zwrot - "to be going to", czas - Future Simple, czas Present Continuous dla przyszłości, 1 tryb warunkowy, wyrażenia dotyczące rzeczowników policzalnych i niepoliczalnych, czasy - Present Perfect i Present Perfect Continuous

#### **Main literature**

Evans V., Dooley J..Enterprise 2.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 2.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Olejnik D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford



University Press 1997  
Murphy R. Essential Grammar in Use. Cambridge University Press

### **Supplementary literature**

#### **Assessment**

**Semester** kończy się egzaminem obejmującym materiał z dwóch **Semesterów**

#### **Language**

angielski; pomocniczo język polski

**Institute : Institute** Architektury

**Subject :** Język angielski 2C

**Subject code :**

**Subject type:** ogólny

**Teaching form :**

Ćwiczenia

**Level:**

**Semester : Summer**

**Semester studiów : 6**

**ECTS points: 3**

**Supervisor:** mgr Mariusz Kowalski

#### **Objectives**

opanowanie przez studentów języka angielskiego w stopniu umożliwiającym komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami zagadnień cywilizacyjno-kulturowych krajów anglojęzycznych. Ponadto studenci szkolą umiejętności słuchania, mówienia, czytania, pisania oraz stosowania gramatycznych aspektów języka na **Levelie** średnio-zaawansowanym niskim. Wprowadzenie słownictwa specjalistycznego zgodnego z kierunkiem studiów.

#### **Prerequisites**

znajomość języka angielskiego na **Levelie** podstawowym w zakresie leksyki, gramatyki i struktur komunikacyjnych,

#### **Subject`s topical content**

udzielanie porad, rekomendacja, składanie propozycji, ofert, zapraszanie, aspekty kulturowe-Vikingowie, Celtowie, życie w przyszłości, wyrażanie opinii, wyrażanie krytyki, starożytne budynki; czasy przeszłe, Future Simple, 'to be going to', 1 tryb warunkowy, mowa zależna, czasy Future Continuous i Future Perfect, strona bierna

#### **Main literature**

Evans V., Dooley J..Enterprise 3 .podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 3 .workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Olejnik D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press 1997

Murphy R. Essential Grammar in Use. Cambridge University Press

### **Supplementary literature**

#### **Assessment**

**Semester** kończy się egzaminem obejmującym materiał z dwóch **Semesterów**

#### **Language**

angielski; pomocniczo język polski

**Institute : Institute** Architektury

**Subject :** Język angielski 2D

**Subject code :**

**Subject type:** ogólny

**Teaching form :**

Ćwiczenia

**Level:**

**Semester : Summer**

**Semester studiów : 6**

**ECTS points: 3**

**Supervisor:** mgr Mariusz Kowalski

#### **Objectives**

opanowanie przez studentów języka angielskiego w stopniu umożliwiającym komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami zagadnień cywilizacyjno-kulturowych krajów anglojęzycznych. Ponadto studenci szkolą umiejętności słuchania, mówienia, czytania, pisania oraz stosowania gramatycznych aspektów języka na **Levelie** średnio-zaawansowanym. Wprowadzenie słownictwa specjalistycznego zgodnego z kierunkiem studiów.

#### **Prerequisites**

znajomość języka angielskiego na **Levelie** średnio - zaawansowanym niskim w zakresie leksyki, gramatyki i struktur komunikacyjnych,

#### **Subject`s topical content**

nieszczęścia, wypadki, relacje w gazetach, przyczyny wypadków i ich zapobieganie, festiwale, uroczystości, wrażenia z nimi związane, przesady, rodzaje jedzenia, opakowania, czasowniki związane z gotowaniem, sprzęt kuchenny, zamawianie w restauracji; tryby warunkowe - 1, 2, 3, mieszane, 'wishes', strona bierna, causative - 'have sth.done', przedimki, wyrażanie preferencji, niepoliczalne i policzalne rzeczowniki i zwroty korespondujące z nimi, 'Question tags'

#### **Main literature**

Evans V., Dooley J., Upstream Intermediate.-podręcznik. Newbury: Express Publishing, 2002.

Evans V., Dooley J., Upstream Intermediate workbook-ćwiczenia. Newbury: Express Publishing, 2002.

Olejniki D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.  
Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press 1997  
Murphy R. Essential Grammar in Use. Cambridge University Press

## **Supplementary literature**

### **Assessment**

**Semester** kończy się egzaminem obejmującym materiał z dwóch **Semesterów**

### **Language**

angielski; pomocniczo język polski

**Institute : Institute** Architektury

**Subject :** język niemiecki

**Subject code :**

**Subject type:** ogólny

**Teaching form :**

Laboratorium

**Level:**

**Semester : Summer**

**Semester studiów : 6**

**ECTS points: 3**

**Supervisor:** mgr Mirosław Grudzień

### **Objectives**

opanowanie przez studentów języka niemieckiego w stopniu umożliwiającym komunikację w różnych sytuacjach życia codziennego oraz zapoznanie studentów z elementami krajoznawstwa niemieckiego obszaru językowego. Celem zajęć jest ponadto szkolenie umiejętności w zakresie słuchania, mówienia, czytania, pisania oraz rozwój kompetencji gramatycznej na **Levelie** podstawowym.

### **Prerequisites**

: znajomość języka niemieckiego na **Levelie** początkującym w zakresie leksyki, gramatyki i struktur komunikacyjnych.,

### **Subject`s topical content**

Treść zajęć: Mówienie: rozumienie najważniejszych zagadnień w tekście prasowym, rozumienie listów prywatnych i oficjalnych. Rozumienie krótkiego tekstu literackiego bazującego na poznanym słownictwie. Umiejętność znalezienia znaczenia nieznanego słowa na podstawie kontekstu, w jakim zostało użyte. Czytanie: udział w rozmowie na tematy codzienne, dotyczące mojej osoby. Planowanie podróży (rozmowa w biurze podróży, zakup biletu na pociąg lub samolot, rezerwacja miejsc w hotelu). Wyrażenie własnego zdania na temat interesujących nas problemów młodzieży, szkoła, przyjaciele, plany na przyszłość, zainteresowania. Parafraza. Załatwianie spraw w banku, na poczcie. Pisanie; umiejętność opisanie jakiegoś wydarzenia. Umiejętność napisania listu prywatnego. Ubieganie się o pracę oparciu o konkretne ogłoszenie z gazety - życiorys i list motywacyjny. Reakcja na ogłoszenie z gazety dot. wynajęcia mieszkania, itp. Materiał gramatyczny: I. czasownik. czasowniki mocne, słabe, rozdzielnie złożone, modalne, zwrotne, nieregularne; czasy: Präsens, Perfekt, Imperfekt, Plusquamperfekt, Futur I.

Tryby: oznajmujący, rozkazujący, warunkowy (tylko würde-Form). Rekcja czasownika. Strona bierna. Strona bierna z czasownikami modalnymi. Strona bierna stanu. Rzeczownik: rodzajnik określony, nieokreślony, brak rodzajnika. Odmiana rzeczownika przez przypadki. Rzeczowniki złożone. Przeczenie nicht, kein, nichts, niemand, nie. Zaimek: osobowy, dzierżawczy, wskazując: dieser, jener oraz alle i beide. Zaimek nieokreślony "es" , zaimek "einander". Przyimek: przyimki z Dativem, Akkusativem, Dativem lub Akkusativem c.d. Przymiotnik: odmiana i stopniowanie. Końcówki przymiotnika po rodzajniku określonym, nieokreślonym i bez rodzajnika. Zdania: zdania proste, twierdzące, pytające, zdania współrzędnie złożone (sonst, trotzdem), wprowadzenie do zdań pobocznych. Słownictwo: Podstawowe słownictwo związane bezpośrednio z życiem codziennym, dotyczące zainteresowań, zakupów, podróży i pracy. Wprowadzenie do czytania tekstów specjalistycznych związanych z architekturą, urbanistyką i zagadnieniami związanymi ze studiowanym kierunkiem.

### **Main literature**

Jadwiga Śmiechowska, Deutsch für dich neu, Wydawnictwo neoGRAF  
Themen neu 1, Kursbuch , Max Hueber Verlag  
Themen neu 1, Arbeitsbuch, Arbeitsbuch, max Hueber Verlag  
Langenscheidt Taschenwörterbuch Deutsch, Langenscheidt KG Berlin und München  
Renate Luscher, Übungsgrammatik, Deutsch als Fremdsprache, Max Hueber Verlag

### **Supplementary literature**

#### **Assessment**

**Semester** kończy się pisemnym sprawdzianem, na podstawie którego wystawiana jest ocena.

#### **Language**

niemiecki, pomocniczo język polski

**Institute :** Institute of architecture  
**Subject :** Conservation of monuments and revalorisation  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**  
**Semester :** Summer  
**Semester of studies :** 6  
**ECTS points:** 2  
**Supervisor:** Małgorzata Korpała, DSc.

**Objectives:**  
Problems of monuments protection in the context of their social function and needs.  
Specificity of designing and conservation of monuments.

**Prerequisites:**  
General knowledge of history of architecture

**Subject`s topical content**  
Legislation concerning monuments protection. Official institutions protecting monuments in Poland. Types and scope of applied procedures: protection, recovery, recomposition, conservation, restoration, moving, reintegration, integration, rebuilding, reconstruction, restitution and expansion. Function and meaning of monuments perceived socially. Giving monuments new functions. Methodology of conservation works: measurement, specialised research (historic, archeological, architectonic, conservatory, constructional and mycological- building expertise) and project works and their execution.

**Main literature**  
Borusiewicz W., Konserwacja zabytków budownictwa murowanego, Warszawa 1985.  
Brykowska M., Metody pomiarów i badań zabytków architektury, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2003.  
Conservatio est aeterna creatio: red. Krawczyk J., UMK, Toruń 1999.  
Czerner O., Architektury istnienie i zachowanie - z szuflady Profesora, muzeum Architektury we Wrocławiu, Wrocław 2004.  
Frycz J., Restauracja i konserwacja zabytków architektury w Polsce w latach 1795 - 1918, Wyd. PWN, Warszawa 1975.  
Jaskulski W., Kocewiak S., Ogrodzki P., Rulewicz J., Vademecum ochrony obiektów

sakralnych, Wyd. 2 zm, Ośrodek Ochrony i Konserwacji Zabytków, Warszawa 1996.  
Kadłuczka A., Ochrona zabytków architektury. T.1, Rozwój doktryn i teorii: (vademecum); PK, Kraków 2000.  
Małachowicz E., Konserwacja i rewaloryzacja architektury w zespołach i krajobrazie, Oficyna Wydawnicza Politechniki Wrocławskiej, Wrocław 1994.  
Pasierb J. S., Ochrona zabytków sztuki kościelnej; Wyd. 4 popr. i zaktual. oprac. Żmudziński J., Towarzystwo Opieki nad Zabytkami, Warszawa 2001.  
Pawlicki B. M., Strategia konserwacji zabytków architektury w Polsce, PK, Kraków 1993.  
Przyłęcki M., Ochrona i rewaloryzacja obiektów zabytkowych [w:] Ochrona budynków przed korozją biologiczną, pod red. J. Ważnego i J. Karysia, wyd. Arkady, Warszawa 2001, s. 305 - 330.  
Renowacja budynków i modernizacja obszarów zabudowanych. red. Biliński T., UZ Zielona Góra 2005.  
Rymaszewski B., Klucze ochrony zabytków w Polsce, wyd. Ośrodek Dokumentacji Zabytków, Warszawa 1992.  
Skrzydło-Niżnik I., Dobosz P., Prawne problemy procesu inwestycyjno-budowlanego i konserwatorskiego - Stan prawny na 1 stycznia 2003 r, wyd. Zakamycze, Kraków 2002.  
Soldani A., Jankowski D., Zabytki: ochrona i opieka: praktyczny komentarz do nowej ustawy: tekst ustawy z dnia 23 lipca 2003 r, Stan prawny na dzień 20 stycznia 2004 r, wyd. Zachodnie Centrum Organizacji, Zielona Góra 2004.  
Zabytkowe budowle drewniane i stolarka architektoniczna wobec współczesnych zagrożeń, red. E. Okoń, Wydaw. Uniwersytetu Mikołaja Kopernika, Toruń 2005.  
Zachwatowicz J.: Ochrona zabytków w Polsce, Wydaw. Polonia, Warszawa 1965

### **Supplementary literature**

#### **Assessment**

Two written tests

#### **Language**

Polish

**Institute :** Institute of architecture  
**Subject** Modernisation and conservation  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Project

**Level:**  
**Semester:** Summer  
**Semester of studies:** 6  
**ECTS points:** 4 with lecture  
**Supervisor:** Wiktor Jackiewicz, prof.

**Objectives**  
Fundamentals and principles of modernisation and conservation of architectonic objects, definitions, terms, notions.

**Prerequisites**  
Completed „History of general architecture” and „ History of Polish architecture”. Basic knowledge of various epochs.

**Subject`s topical content**  
Principles of protection and conservation of monuments. Definition and terms. Types of conservatory works. Theoretical and legal implications. Scope of research. The concept of stratigraphy, obtaining research data. The outline of the history of monuments renovation. Conservation areas and monuments conservation scope. Modernisation and conservation – adaptative measures for modern purposes. Project of selected architectonic object modernisation.

**Main literature**  
M. Przyłęcki "Zabytki-konserwacja i rewaloryzacja " ZOSKZ Silesia  
E. Małachowicz "Konserwacja i rewaloryzacja architektury w zespołach i krajobrazie" OW Wrocław  
A. Krzemień "Materiałoznawstwo tworzyw sztucznych i ich konserwacja" Łódź, W-wa  
J. Borowski "Ochrona zabytków" Gdańsk OW  
W. Borusewicz "Niektóre problemy konserwacji" OZ W-wa  
Opr. Zbiorowe "Ochrona zabytków przed korozją biologiczną" UMK Toruń

**Supplementary literature**

**Assessment**  
Textual and graphic tests. Final graphic and textual exam

**Language**  
Polish

**Institute :** Institute of architecture  
**Subject** Modernisation and conservation  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Project

**Level:**  
**Semester:** Summer  
**Semester of studies:** 6  
**ECTS points:** 4 with project  
**Supervisor:** Wiktor Jackiewicz, prof.

### **Objectives**

Fundamentals and principles of modernisation and conservation of architectonic objects, definitions, terms, notions.

### **Prerequisites**

Completed „History of general architecture” and „ History of Polish architecture”. Basic knowledge of various epochs.

### **Subject`s topical content**

Principles of protection and conservation of monuments. Definition and terms. Types of conservatory works. Theoretical and legal implications. Scope of research. The concept of stratigraphy, obtaining research data. The outline of the history of monuments renovation. Conservation areas and monuments conservation scope. Modernisation and conservation – adaptative measures for modern purposes.

### **Main literature**

J. Borowski "Ochrona zabytków" Gdańsk OW  
W. Borusewicz "Niektóre problemy konserwacji" OZ W-wa  
A. Krzemień "Materiałoznawstwo tworzyw sztucznych i ich konserwacja" Łódź, W-wa  
E. Małachowicz "Konserwacja i rewaloryzacja architektury w zespołach i krajobrazie" OW Wrocław  
M. Przyłęcki "Zabytki-konserwacja i rewaloryzacja " ZOSKZ Silesia  
Opr. Zbiorowe "Ochrona zabytków przed korozją biologiczną" UMK Toruń  
Opracowanie zbiorowe "Zabytkowe drewno - konserwacja i badania" UMK Toruń

### **Supplementary literature**

### **Assessment**

Textual and graphic tests. Final graphic and textual exam

### **Language**

Polish



**Institute :** Institute of architecture  
**Subject :** Investment process  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**  
**Semester:** Summer  
**Semester of studies:** 6  
**ECTS points:** 1  
**Supervisor:** Tadeusz Pawlik, MSc

### **Objectives**

Presenting fundamentals of organising, investment undertakings, structure of the process. Discussing adaptation aspects of co-operation with the EU. Presenting main aspects of investment process, decision making and investment participation, leading role of an architect and their responsibility in investment process; presenting some aspects of investment process (marketing, technology, organisation, economy and legislation).

**Prerequisites**  
none

### **Subject`s topical content**

Main terms concerning building investments; stages of investment process: pre-project stage – formulating and justification of investment. Analysis of localisation, financing and investment execution, preliminary programme of an enterprise and its impact on the environment, etc. Project stage – preparing functional-user`s programme of the investment, auctions, conservation premises, space analysis, building project and its support, building legal decisions; Execution – submitting building execution, building plan, building documentation, building expertise, building scope of works to be performed, schedule of building works, investment and financing sources; Post-execution – post-execution documentation (obligatory and others), start-up and exploitation.

### **Main literature**

Korzeniewski.: Przygotowanie inwestycji budowlanych. Stadium przedprojektowe, Polcen, Warszawa 2004r.

Werner W.: Proces inwestycyjny. Studium przypadku, OWPW, Warszawa, 1999r.

Jaworski K.: Metodologia projektowania i realizacji budowy, Wyd. Naukowe PWN, Warszawa, 1999r.

Ryńska E.D.: Architekt w procesie tworzenia harmonijnego środowiska, OWPW, Warszawa, 2004r.

### **Supplementary literature**

### **Assessment**

Attendance and final written test

### **Language**

Polish

**Institute:** Institute of architecture  
**Subject :** Diploma seminar  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**

Seminar

**Level:**

**Semester :** Summer

**Semester studiów :** 6

**ECTS points:** 2

**Supervisor:** all lectures

**Objectives:**

Preparing materials and output data for diploma. Acceptance, agreement, between the student and the lecturer as regards the topic of the thesis.

**Prerequisites**

Completed previous semesters, individual architectonic-urbanistic designing.

**Subject`s topical content**

1. Student`s individual work should include (specialised literature) analytically supported topic of diploma thesis. 3. Outstanding architectonic objects. 4. It should also include surface areas of main indexes (e.g. M2, M3 per one user, number of users, etc.). Graphic part should include: drawings of projections and elevations in appropriate scale. 5. Cartographic maps which will include parameters of situation (S), height (H), armament (A) scaled. Moreover, other documentation elements such as photos are expected to be included. 6. Project assignments for diploma: descriptive parts – interiors and their functionality, technologies, data users` number, space and terrain area.

**Main literature**

Specialised literature connected with the thesis

Neufert. Podręcznik projektowania architektoniczno-budowlanego. Arkady, Warszawa.

**Supplementary literature**

**Assessment**

Committee assessment,  
Project assignments,  
Seminar presentations

**Language**

Polish

**Institute :** Institute of architecture

**Subject :** Sociology of housing

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Lecture

**Level:**

**Semester:** Summer

**Semester studiów:** 6

**ECTS points:** 2

**Supervisor:** Tomasz Drewniak, DSc.

**Objectives**

Presenting some aspects of axiological, social and historical context as regards town housing and other housing facilities. Planning and architecture as one of the fundamental human activities.

**Prerequisites**

Knowledge on social problems and the history of culture and architecture.

**Subject`s topical content**

Towns` archetype of Western civilisation. Town as a centre and synonym of civilisation. Concept of housing and its origins: Greek oikos (houshold – family) as a unity of heaven and earth, man and god. "poetic man`s living" – mother-land, language, thinking and building. From polis to megapolis: town transformations and organisation. Space, town and social bonds. Space and town management, human relationships

**Main literature**

Z. Bauman, Globalizacja. Warszawa 2000.

Gospodarka przestrzenna i zarządzanie miastem z perspektywy doświadczeń krajów Unii Europejskiej, red, T. Marszał, Łódź 1996.

M. Heidegger, Budować, mieszkać, myśleć.

Z. Pióro, Przestrzeń i społeczeństwo: z badań ekologii społecznej, Warszawa 1982.

J. Szacki, Historia myśli socjologicznej.

K. Pawłowska, Idea swojskości w urbanistyce i architekturze miejskiej, Kraków 1996.

J. P. Vernant, Źródła myśli greckiej.

A. Wallis, Socjologia i kształtowanie przestrzeni.

A. Wallis, Ameryka - Miasto, Warszawa 1987.

**Supplementary literature****Assessment**

written test

**Language**

Polish

**Institute :** Institute of architecture

**Subject :** Town structure

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:**

**Semester :** Summer

**Semester of studies :** 6

**ECTS points:** 2

**Supervisor:** Konrad Dobrowolski, DSc.

**Objectives**

Designing systems of increasing complexity of composition. Forms of urbanistic planning.

**Prerequisites**

Knowledge of transportation systems, space planning.

**Subject`s topical content**

High-standard municipal constructions. New developments in town`s planning – housing, work, relaxation and transport.

### **Main literature**

Niska intensywna zabudowa mieszkaniowa, Chmielewski Jan Maciej, Katedra Urbanistyki i Gospodarki Przestrzennej Wydziału Architektury Politechniki Warszawskiej, W-wa 1996  
Teoria urbanistyki w projektowaniu i planowaniu miast, Oficyna Wydawnicza Politechniki Warszawskiej, W-wa 2001  
Planowanie miast i osiedli, PWN, W-wa 1970  
Kształtowanie zespołów zabudowy mieszkaniowej, Hanna Adamczewska-Wejhert, Arkady, Warszawa 1987

### **Supplementary literature**

### **Assessment**

Project, class assignments, individual work

### **Language**

Polish

**Institute :** Institute of architecture

**Subject :** Study and plan of spatial urbanisation

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Faculty

**Level:**

**Semester:** Summer

**Semester studiów:** 6

**ECTS points:** 5 with project

**Supervisor:** Wiesława Strabel, DSc.

### **Objectives**

Foundations of systematic, interdisciplinary activity; regional planning and space organisation; main legal regulations thereof. Active attitude to space planning. Analysing existing plans.

### **Prerequisites**

Fundamentals of architecture and urbanistics, ecology, sociology, geography, culture and arts.

### **Subject`s topical content**

- 4) Plans formulation, spatial effect, graphic skills, scaling and other pertinent problems.

### **Main literature**

Ustawa z dnia 27 marca 2003r. o planowaniu i zagospodarowaniu przestrzennym (Dz. U.2003.80.717 z późn.zm.).

Rozporządzenie Ministra infrastruktury z dnia 26 sierpnia 2003r. w sprawie

wymaganego zakresu projektu miejscowego plan zagospodarowania przestrzennego  
Rozporządzenie Ministra infrastruktury z dnia 26 sierpnia 2003r. w sprawie sposobu ustalania wymagań dotyczących nowej zabudowy i zagospodarowania terenu w przypadku braku miejscowego plan zagospodarowania przestrzennego (Dz. U.03. 165.1588, z późn.zm.)  
Rozporządzenie Ministra Infrastruktury z dnia 26 sierpnia 2003r. w sprawie oznaczeń i nazewnictwa stosowanych w decyzji o ustaleniu lokalizacji inwestycji celu publicznego oraz w decyzji o warunkach zabudowy (Dz. U.03. 165.1589, z późn.zm.).

### **Supplementary literature**

#### **Assessment**

Committee assessment (2 supervisors) of the project  
Assessment of project clauses (min. 2) made during classes  
Assessment of work advancement

### **Language**

Polish

**Subject :** Study and plan of spatial urbanisation

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:**

**Semester:** Summer

**Semester studiów:** 6

**ECTS points:** 5 with lecture

**Supervisor:** Wiesława Strabel, DSc.

### **Objectives**

Developing skills in space planning in such a way that a balanced development of the region is secured, and that local environmental, cultural interdependencies are maintained and accounted for. The student will also acquire some workshop skills particularly in graphics.

### **Prerequisites**

Knowledge of the elements of history of architecture and urbanistics, ecology, sociology, socio-economic geography.

### **Subject`s topical content**

- 5) Preparing a project of space organisation for a selected area of about 10 ha. The project will entail gathering suitable number of data enabling formulation of coherent plan accounting for all modifications to be introduced in the area.

#### **Main literature**

Ustawa z dnia 27 marca 2003r. o planowaniu i zagospodarowaniu przestrzennym (Dz. U.2003.80.717 z późn.zm.).

Rozporządzenie Ministra infrastruktury z dnia 26 sierpnia 2003r. w sprawie wymaganego zakresu projektu miejscowego plan zagospodarowania przestrzennego

Rozporządzenie Ministra infrastruktury z dnia 26 sierpnia 2003r. w sprawie sposobu ustalania wymagań dotyczących nowej zabudowy i zagospodarowania terenu w przypadku braku miejscowego plan zagospodarowania przestrzennego

(Dz. U.03. 165.1588, z późn.zm.).

Rozporządzenie Ministra Infrastruktury z dnia 26 sierpnia 2003r. w sprawie oznaczeń i nazewnictwa stosowanych w decyzji o ustaleniu lokalizacji inwestycji celu publicznego oraz w decyzji o warunkach zabudowy (Dz. U.03. 165.1589, z późn.zm.).

### **Supplementary literature**

#### **Assessment**

Committee assessment (2 supervisors) of the project

Assessment of project clauses (min. 2) made during classes

Assessment of work advancement

#### **Language**

Polish

**Institute :** Institute of architecture  
**Subject :** Theory of urbanistics and ruralistics  
**Subject code :**  
**Subject type:** faculty  
**Teaching form :**  
Lecture

**Level:**  
**Semester :** Summer  
**Semester of studies :** 6  
**ECTS points:** 2  
**Supervisor:** Krzysztof Gasidło, DSc.

### **Objectives**

Giving knowledge on municipal and rural settlement which has a practical application in architectonic, urban and space planning .

### **Prerequisites**

Basic knowledge on municipal and rural settlement, general history, physical and economic geography on the secondary school level, some skills in urban planning.

### **Subject`s topical content**

Growth and transformation of settlement areas; urbanisation, suburbanisation, disurbanisation, reurbanisation, town complexes, metropolisation, theories of settlement distribution; municipal space management, operational urbanistics.

### **Main literature**

Chmielewski J.M: Teoria urbanistyki w projektowaniu urbanistycznym, Oficyna Wyd. Politechniki Warszawskiej, Warszawa 2001  
Słodczyk J: Przestrzeń miasta i jej przeobrażenia, Wyd. Uniw. Opolskiego, Opole 2003  
Jałowiecki B., Szczepański M: Rozwój lokalny i regionalny w perspektywie socjologicznej , Śląskie Wyd. Nauk. Wyższej Szkoły Zarządzania i Nauk Społecznych, Tychy 2002  
Castells M.: Kwestia miejska, Warszawa 1982  
Ziobrowski Z. (red): Rewitalizacja, rehabilitacja, restrukturyzacja. Odnowa miast, Inst. Gosp. Przestrzennej i Komunalnej, Kraków 2000.

### **Supplementary literature**

### **Assessment**

Written test

### **Language**

Polish

## **SEMESTER VII**

**Institute :** Institute of architecture

**Subject :** Ekonomia procesu inwestycyjnego – czy to nie ma być na IV **Semesterze?**

**Subject code :**

**Subject type:** elementary



**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 7

**ECTS points:** 2

**Supervisor:** Tadeusz Pawlik, MSc

**Objectives**

Economic implications regarding investment process in environmental planning.

**Prerequisites**

none

**Subject`s topical content**

Main definitions; effects in building investment process; cost accounting; value assessment of real estates and building objects.

**Main literature**

Korzeniewski.: Przygotowanie inwestycji budowlanych. Stadium przedprojektowe, Polcen, Warszawa 2004r.

Werner W.: Proces inwestycyjny dla architektów, OWPW, Warszawa, 1994r.

Ryńska E.D.: Architekt w procesie tworzenia harmonijnego środowiska, OWPW, Warszawa, 2004r.

SEKOCENBUD: Biuletyn cen robót zagregowanych elementów i obiektów budowlanych, OWEOB Promocja, Warszawa.

**Supplementary literature****Assessment**

Attendance, final written test

**Language**

Polish

**Institute :** Institute of architecture

**Subject :** Ethics in architecture

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 7

**ECTS points:** 2

**Supervisor:** Tomasz Drewniak, DSc.

**Objectives**

Basic ethical concepts. Genesis and structure of free market, its axiology and ethical problems. Interpretation of moral behaviour in business activities.

**Prerequisites**

General education, some knowledge of social phenomena, perceptual skills, self-reflexion,

**Subject`s topical content**

Ethics, moral standards, customs. Character of moral behaviour. Main ethics trends: edaimonism, personalism, deontonomism. Business ethics, labour ethics. Relationship between needs, moral standards and general welfare according to A. Smith. Modern social and economic organisation: free market, welfare and political freedom. Weber`s interpretation of protestant spirit of capitalism. An individual, morality and free market versus state and politics. Ethics in architecture in the context of free market economy and other ethical values.

**Main literature**

V. J. Bourke, Historia etyki, przeł. A. Białek, Toruń 1994.  
G. D. Chrysidis, J. H. Kaler, Wprowadzenie do etyki  
S. Dziamski, Kultura i etyka życia społeczno-zawodowego.  
J. Galarowicz, Na ścieżkach prawdy, Kraków 1992.  
A. MacIntyre, Krótka historia etyki, przeł. A. Chmielewski, Warszawa 1995.  
S. Konstańczak, Odkryć sens życia w swej pracy..  
J. Płocka, Kultura zawodu, Toruń 1996.  
Przewodnik po etyce, red. P. Singer, Warszawa 1998 (2000).  
S. Soldenhoff, Rozwój etyki normatywnej, w: Etyka, red. H. Jankowski, Warszawa 1973.  
S. Soldenhoff, Wprowadzenie do etyki, Warszawa 1972  
T. Styczeń, Wprowadzenie do etyki, Lublin 1995.  
J. Szacki, Historia myśli socjologicznej, Warszawa 2002.  
T. Ślipko, Etos chrześcijański. Zarys etyki ogólnej, Kraków 1974.  
W. Tatarkiewicz, Historia filozofii, t.1-3.  
M. Weber, Etyka protestancka a duch kapitalizmu, Lublin 1994.

**Supplementary literature****Assessment**

written test

**Language**

Polish

**Institute :** Institute of architecture

**Subject :** Diploma thesis

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Project

**Level:** advanced

**Semester :** Winter

**Semester of studies :** 7

**ECTS points:** 15

**Supervisors:** lecturers, professors

**Opis przedmiotu**

**Institute :** Institute of architecture

**Subject :** Legislation

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 7

**ECTS points:** 2

**Supervisor:** Tadeusz Pawlik, MSc.

**Objectives**

Fundamentals of building legislation regarding especially the process of planning and investing. The lecture will present some of the consequences in case the legislation is not followed

**Prerequisites**

none

### **Subject`s topical content**

The essence, subject matter and scope of building legislation; space planning legislation and its links with building legislation; rights and duties of those involved in a building process; permission of usage and maintenance of building objects; architectonic and building administration and supervision; councils of architects, building engineers and urbanists; building licences.

### **Main literature**

Prawo budowlane - ustawa z 7.07.1994,  
Ustawa o planowaniu i zagospodarowaniu przestrzennym z dn. 27.03.2003 r.,  
Biliński T.: Prawo budowlane, Wydawnictwo UZG, 2006r.  
Werner W.A.: Proces inwestycyjny dla architektów, OWPW, Warszawa, 2000r.  
Zbiory aktów prawnych publikowane na [www.izbaarchitektow.pl](http://www.izbaarchitektow.pl) oraz [www.piib.org.pl](http://www.piib.org.pl).

### **Supplementary literature**

#### **Assessment**

Attendance, final written test

#### **Language**

Polish

**Institute :** Institute of architecture

**Subject :** Diploma seminar

**Subject code :**

**Subject type:** faculty

**Teaching form :**

Seminar

**Level:**

**Semester :** Winter

**Semester of studies :** 7

**ECTS points:** 9

**Supervisors:** lecturers, seminar supervisor

#### **Objectives**

Preparing materials and data for the thesis. Topic to be selected by the student and accepted by the supervisor

#### **Prerequisites**

Completed previous semesters, skills in individual architectonic-urbanistic planning.

### **Subject`s topical content**

The student should have a sound, literature-based knowledge on the topic chosen for the thesis which will include an analysis of three examples of objects (architecture) or terrains (urbanistics, space planning). The analysis will concern detailed specification of necessary parameters. A graphic part will include drawings of projections and cross-sections in an appropriate scale.

In the case of urbanistic type, the thesis should include a functional-spatial programme together with main parameters describing e.g. intensity of urbanisation; a graphic part of the thesis should include a terrain urbanisation, terrain cross-sections and other illustrations. Moreover, it is necessary that the following be attached: cartographic maps specifying the overall situation (S), height (H), armament (A) and records (R) presented in an appropriate scale.

The thesis will also include a project task which will provide details pertinent to the thesis. They will concern such data as objects and interiors listings, functional-spatial diagrams, and other user's parameters.

### **Main literature**

Literature related to the thesis

Neufert. Podręcznik projektowania architektoniczno-budowlanego. Arkady, Warszawa.

### **Supplementary literature**

#### **Assessment**

Committee assessment

Project assignment

Seminar presentations

The thesis

#### **Language**

Polish

**Institute :** Institute of architecture

**Subject :** Management

**Subject code :**

**Subject type:** elementary

**Teaching form :**

Lecture

**Level:**

**Semester :** Winter

**Semester of studies :** 7

**ECTS points:** 2

**Supervisor:** Tadeusz Pawlik, MSc.

### **Objectives**

Fundamentals of management related to architecture and building engineering

### **Prerequisites**

none

### **Subject`s topical content**

Subject matter and scope of management; theory of and approach to management; ecological implications, principles of balanced development of environment, modelling of organisational structure; business management and organisation; planning in an organisation; management styles and decision making; controlling; information management; business ethics; quality and reserves management.

### **Main literature**

Werner W.A.: Zarządzanie w procesie inwestycyjnym, OWPW, Warszawa, 1999r.

Górska E., Lewandowski J.: Podstawy zarządzania i kształtowania środowiska pracy, OWPW, Warszawa, 2002r.

Ryńska D.Elżbieta.: Architekt w procesie tworzenia harmonijnego środowiska, OWPW, Warszawa, 2004r.

[www.izbaarchitektow.pl](http://www.izbaarchitektow.pl)

### **Supplementary literature**

### **Assessment**

Attendance, final written test

### **Language**

Polish

**Subject:** English  
**Subject code:** -  
**Class type:** practical classes; 30 hrs.  
**Level:** A 1- beginner  
**Year of study:** III  
**Semester:** winter  
**Number of points:** 2  
**Lecturer:**

**Objectives:** acquiring the command of English enabling basic communication in various everyday situations, and, presenting the students with some elements of social and cultural issues in English speaking countries. Students are expected to develop speaking, listening, reading and writing skills at the beginner level. Introducing professional vocabulary related to the studied faculty.

**Prerequisites:** none

**Topics:** Names of countries and nationalities, professions, introducing oneself, describing people, home, furniture; the verb 'to be', 'to have got', modal verb – 'can', prepositions of place, 'there is/are' structures, demonstrative pronouns, plural number of nouns, the articles – 'a' and 'an'.

**Recommended literature:**

Main literature:

Evans V., Dooley J..Enterprise 1.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 1.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Supplementary literature:

Murphy R. Essential Grammar in Use. Cambridge University Press, 2002.

Olejniak D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press, 1997.

Tietz J., The Story of Architecture. Cologne: Könemann, 1999.

White, L. Engineering. Workshop. Oxford: Oxford University Press, 2003.

**Teaching method:** communicative, translatory-grammatical

**Assessment:** activity, classes attendance, final written test.

**Language:** English; accessorially Polish.

**Subject:** English  
**Subject code:** -  
**Class type:** practical classes; 30 hrs.  
**Level:** A2 - elementary  
**Year of study:** III  
**Semester:** winter  
**Number of points:** 2  
**Lecturer:**

**Objectives:** acquiring the command of English enabling communication in various everyday situations, and, presenting the students with some elements of social and cultural issues in English speaking countries. Students are expected to develop speaking, listening, reading and writing skills at the elementary level. Introducing professional vocabulary related to the studied faculty.

**Prerequisites:** knowledge of English lexis, grammar and communication structures at the beginner level.

**Topics:** describing places and people, routine daily activities, identifying objects, expressing one's feelings; structures and uses of Present/Past Simple/Continuous Tenses; 'used to' form; adjectives and adverbs.

### **Recommended literature**

#### Main literature:

Evans V., Dooley J..Enterprise 1.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 1.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

#### Supplementary literature:

Murphy R. Essential Grammar in Use. Cambridge University Press, 2002.

Olejniak D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press, 1997.

Tietz J., The Story of Architecture. Cologne: Könemann, 1999.

White, L. Engineering. Workshop. Oxford: Oxford University Press, 2003.

**Teaching method:** communicative, translatory-grammatical

**Assessment:** activity, classes attendance, final written test.

**Language:** English; accessorially Polish.



**Subject:** English  
**Subject code:** -  
**Class type:** practical classes; 30 hrs.  
**Level:** B1- pre-intermediate  
**Year of study:** III  
**Semester:** winter  
**Number of points:** 2  
**Supervisor:**

**Objectives:** acquiring the command of English enabling communication in various everyday situations, and, presenting the students with some elements of social and cultural issues in English speaking countries. Students are expected to develop speaking, listening, reading and writing skills at the pre-intermediate level. Introducing professional vocabulary related to the studied faculty.

**Prerequisites:** : knowledge of English lexis, grammar and communication structures at the elementary level.

**Topics:** describing people – appearance and character, clothes, interests, hobby, place of living, weather, adjectives describing places, holiday places, giving directions, recommendations, books, senses, describing animals - their habitats and the way they live; tenses – Present Simple, Present Continuous, Present Perfect, Present Perfect Continuous, Past Simple, Past Continuous, Past Perfect, Past Perfect Continuous, prepositions of place, definite article, cause-result sentences, modal verbs, comparisons

**Recommended literature:**

Main literature:

Evans V., Dooley J..Enterprise 1.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 1.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Supplementary literature:

Murphy R. Essential Grammar in Use. Cambridge University Press, 2002.

Olejniak D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press, 1997.

Tietz J., The Story of Architecture. Cologne: Könemann, 1999.

White, L. Engineering. Workshop. Oxford: Oxford University Press, 2003.

**Teaching method:** communicative, translatory-grammatical

**Assessment:** activity, classes attendance, final written test.

**Language:** English; accessorially Polish.

**Subject:** English  
**Subject code:** -  
**Class type:** practical classes; 30 hrs.  
**Level:** B2- intermediate  
**Year of study:** III  
**Semester:** winter  
**Number of points:** 2  
**Supervisor:**

**Objectives:** acquiring the command of English enabling communication in various everyday situations, and, presenting the students with some elements of social and cultural issues in English speaking countries. Students are expected to develop speaking, listening, reading and writing skills at the intermediate level. Introducing professional vocabulary related to the studied faculty.

**Prerequisites:** : knowledge of English lexis, grammar and communication structures at the pre-intermediate level.

**Topics:** jobs, describing people – appearance, character, weather, place of living, accommodation, books, senses, feelings and reactions; Present Simple, Present Continuous, 'too' 'enough', relative pronouns, past tenses, Present Perfect, Present Perfect Continuous, reported speech

**Recommended literature:**

Main literature:

Evans V., Dooley J. Enterprise 4.-podręcznik. Newbury: Express Publishing, 1998.  
Evans V., Dooley J. Enterprise 4. workbook.-ćwiczenia. Newbury: Express Publishing, 1998.  
Evans V., Dooley J., Upstream Intermediate.-podręcznik. Newbury: Express Publishing, 2002.  
Evans V., Dooley J., Upstream Intermediate workbook-ćwiczenia. Newbury: Express Publishing, 2002.

Supplementary literature:

Murphy R. Essential Grammar in Use. Cambridge University Press, 2002.  
Olejnik D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.  
Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press, 1997.  
Tietz J., The Story of Architecture. Cologne: Könemann, 1999.  
White, L. Engineering. Workshop. Oxford: Oxford University Press, 2003.

**Teaching method:** communicative, translatory-grammatical

**Assessment:** activity, classes attendance, final written test.

**Language:** English; accessorially Polish.

**Subject:** English  
**Subject code:** -  
**Class type:** practical classes; 30 hrs.  
**Level:** A 1- beginner  
**Year of study:** III  
**Semester:** winter

**Number of points:** 2

**Lecturer:**

**Objectives:** acquiring the command of English enabling basic communication in various everyday situations, and, presenting the students with some elements of social and cultural issues in English speaking countries. Students are expected to develop speaking, listening, reading and writing skills at the beginner level. Introducing professional vocabulary related to the studied faculty.

**Prerequisites:** none

**Topics:** Names of countries and nationalities, professions, introducing oneself, describing people, home, furniture; the verb 'to be', 'to have got', modal verb – 'can', prepositions of place, 'there is/are' structures, demonstrative pronouns, plural number of nouns, the articles – 'a' and 'an'.

**Recommended literature:**

Main literature:

Evans V., Dooley J..Enterprise 1.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 1.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Supplementary literature:

Murphy R. Essential Grammar in Use. Cambridge University Press, 2002.

Olejniak D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press, 1997.

Tietz J., The Story of Architecture. Cologne: Könemann, 1999.

White, L. Engineering. Workshop. Oxford: Oxford University Press, 2003.

**Teaching method:** communicative, translatory-grammatical

**Assessment:** activity, classes attendance, final written test.

**Language:** English; accessorially Polish.

**Subject:** English

**Subject code:** -

**Class type:** practical classes; 30 hrs.

**Level:** A2 - elementary

**Year of study:** III

**Semester:** winter

**Number of points:** 2

**Lecturer:**

**Objectives:** acquiring the command of English enabling communication in various everyday situations, and, presenting the students with some elements of social and cultural issues in English speaking countries. Students are expected to develop speaking, listening, reading and writing skills at the elementary level. Introducing professional vocabulary related to the studied faculty.

**Prerequisites:** knowledge of English lexis, grammar and communication structures at the beginner level.

**Topics:** describing places and people, routine daily activities, identifying objects, expressing one`s feelings; structures and uses of Present/Past Simple/Continuous Tenses; `used to` form; adjectives and adverbs.

**Recommended literature**Main literature:

Evans V., Dooley J..Enterprise 1.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 1.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Supplementary literature:

Murphy R. Essential Grammar in Use. Cambridge University Press, 2002.

Olejniak D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press, 1997.

Tietz J., The Story of Architecture. Cologne: Könemann, 1999.

White, L. Engineering. Workshop. Oxford: Oxford University Press, 2003.

**Teaching method:** communicative, translatory-grammatical

**Assessment:** activity, classes attendance, final written test.

**Language:** English; accessorially Polish.

**Subject:** English

**Subject code:** -

**Class type:** practical classes; 30 hrs.

**Level:** B1- pre-intermediate

**Year of study:** III

**Semester:** winter

**Number of points:** 2

**Supervisor:**

**Objectives:** acquiring the command of English enabling communication in various everyday situations, and, presenting the students with some elements of social and cultural issues in English speaking countries. Students are expected to develop speaking, listening, reading and writing skills at the pre-intermediate level. Introducing professional vocabulary related to the studied faculty.

**Prerequisites:** : knowledge of English lexis, grammar and communication structures at the elementary level.

**Topics:** describing people – appearance and character, clothes, interests, hobby, place of living, weather, adjectives describing places, holiday places, giving directions, recommendations, books, senses, describing animals - their habitats and the way they live; tenses – Present Simple, Present Continuous, Present Perfect, Present Perfect Continuous, Past Simple, Past Continuous, Past Perfect, Past Perfect Continuous, prepositions of place, definite article, cause-result sentences, modal verbs, comparisons

**Recommended literature:**Main literature:

Evans V., Dooley J. Enterprise 1.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J. Enterprise 1. workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Supplementary literature:

Murphy R. Essential Grammar in Use. Cambridge University Press, 2002.

Olejniak D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press, 1997.

Tietz J., The Story of Architecture. Cologne: Könemann, 1999.

White, L. Engineering. Workshop. Oxford: Oxford University Press, 2003.

**Teaching method:** communicative, translatory-grammatical

**Assessment:** activity, classes attendance, final written test.

**Language:** English; accessorially Polish.

**Subject:** English

**Subject code:** -

**Class type:** practical classes; 30 hrs.

**Level:** B2- intermediate

**Year of study:** III

**Semester:** winter

**Number of points:** 2

**Supervisor:**

**Objectives:** acquiring the command of English enabling communication in various everyday situations, and, presenting the students with some elements of social and cultural issues in English speaking countries. Students are expected to develop speaking, listening, reading and writing skills at the intermediate level. Introducing professional vocabulary related to the studied faculty.

**Prerequisites:** : knowledge of English lexis, grammar and communication structures at the pre-intermediate level.

**Topics:** jobs, describing people – appearance, character, weather, place of living, accommodation, books, senses, feelings and reactions; Present Simple, Present Continuous, 'too' 'enough', relative pronouns, past tenses, Present Perfect, Present Perfect Continuous, reported speech

**Recommended literature:**

Main literature:

Evans V., Dooley J..Enterprise 4.-podręcznik. Newbury: Express Publishing, 1998.

Evans V., Dooley J..Enterprise 4.workbook.-ćwiczenia. Newbury: Express Publishing, 1998.

Evans V., Dooley J., Upstream Intermediate.-podręcznik. Newbury: Express Publishing, 2002.

Evans V., Dooley J., Upstream Intermediate workbook-ćwiczenia. Newbury: Express Publishing, 2002.

Supplementary literature:

Murphy R. Essential Grammar in Use. Cambridge University Press, 2002.

Olejniak D., Repetytorium Leksykalne. Poznań: LektorKlett, 2005.

Oxford Wordpower. Słownik Angielsko-Polski z indeksem polsko-angielskim; Oxford University Press, 1997.

Tietz J., The Story of Architecture. Cologne: Könemann, 1999.

White, L. Engineering. Workshop. Oxford: Oxford University Press, 2003.

**Teaching method:** communicative, translatory-grammatical

**Assessment:** activity, classes attendance, final written test.

**Language:** English; accessorially Polish.