



BRIEF GUIDE TO FACULTY CURRICULUM
ACADEMIC INFORMATION FOR EXCHANGE STUDIES

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA
FACULTY OF ARCHITECTURE AND URBAN PLANNING



Dear exchange students and international partners,

This is a brief guide through the curriculum of the Faculty of Architecture and Urban Planning at the Technical University of Cluj-Napoca. We offer a six-year - bachelor and master integrated - programme towards obtaining the Diploma of Architect.

Holding high the formative impact, cultural enrichment, and creative inspiration of international experience in architectural education, we are committed to fostering sustainable and meaningful student and academic staff exchange. External participation in our diploma-project juries has become a tradition.

While in our Faculty courses are currently taught in Romanian, exchange students and staff are warmly welcome. We offer our mobility students English tutoring and guidance for project work and other practical assignments, as well as English references to support and complement theoretical disciplines.

We look forward to partnering in projects that enhance architectural education's potential of playing a relevant, responsible, and regenerating role in contemporary societies and territories.



TECHNICAL UNIVERSITY OF CLUJ-NAPOCA
FACULTY OF ARCHITECTURE AND URBAN PLANNING

01

- 1.00 Mathematics
- 2.00 History of Ancient Architecture
- 3.00 Theory of Architecture - An Introduction
- 4.00 Environmental Aspects in Urban Planning
- 5.00 Descriptive Geometry
- 6.00 The Study of Form and Visual Representation 1
- 7.00 Architectural Design Studio 1
- 8.10-8.40 Foreign Languages 1
- 9.00 Physical Education 1
-
- 10.00 Perspectives
- 11.00 History of Mediaeval Architecture
- 12.00 Urban Morphology
- 13.00 Building Materials
- 14.00 Study of Form and Visual Representation 2
- 15.00 Architectural Design Studio 2
- 16.10-16.40 Foreign Languages 2
- 17.00 Physical Education 2
- 18.00 Practical Activity I

02

- 17.00 History of Renaissance and Baroque Architecture
- 18.00 Urban Morphology
- 19.00 Computer Aided Design
- 20.00 Elements of Construction
- 21.00 The Geometry of Architectural Forms
- 22.00 Mechanics
- 23.00 Basic Design Regulations 1
- 24.00 Architectural Design Studio 3
-
- 25.00 Residential Planning
- 26.00 Theory of Architecture - Dwelling
- 27.00 Aspects of Human Settlement Planning
- 28.00 Details in Architecture 1
- 29.00 Art History
- 30.00 Basic Design Regulations 2
- 31.00 Architectural Design Studio 4
- 32.00 Practical Activity II

03

- 33.10 Global and Local in Architecture
- 33.20 Space Perception and Configuration
- 33.30 Academic Ethics
- 34.00 Structural Engineering Theory 1
- 35.00 History of Furniture - Styles
- 36.00 Specialised Design - Urban Planning 1
- 37.00 Details in Architecture 2
- 38.00 History of 19th-Century Architecture
- 39.00 Ecological Architecture
- 40.00 Architectural Design Studio 5
-
- 41.10 Traditional Furniture
- 41.20 Furniture of the 20th Century
- 41.30 Furniture Design Technique
- 42.00 Structural Engineering Theory 2
- 43.00 Building Services
- 44.00 History of Modern and Contemporary Architecture
- 45.00 Building Types
- 46.00 Specialised Design - Furniture
- 47.00 Architectural Design Studio 6
- 48.00 Practical Activity III

04

- 49.10 Parametric Design
- 49.20 Environmental Design
- 49.30 Design in Architecture
- 50.00 History of Architecture in Romania
- 51.00 Theories and Doctrines in Contemporary Architecture
- 52.00 Sociology
- 53.00 Interior Architecture
- 54.00 Specialised Design - Interior Architecture
- 55.00 Specialised Design - Technical Design
- 56.00 Design Synthesis Studio 1
-
- 57.10 Special Structures
- 57.20 Pathology and Therapy of Historic Structures
- 57.30 Historic Building Recovery
- 58.10 Urban Composition
- 58.20 Urban Structures
- 58.30 Digital Fabrication
- 59.00 Restoration of Historic Buildings
- 60.00 Structural Engineering Theory 3
- 61.00 Physics of Construction and Urban Environment
- 62.00 Specialised Design - Urban Planning 2
- 63.00 Design Synthesis Studio 2
- 64.00 Practical Activity IV

05

- 65.10 The Contemporary City
- 65.20 Human Settlement Strategies
- 65.30 Urban Strategies and Policies
- 66.10 Arts and Architecture
- 66.20 Psychology of Form
- 66.30 Anthropology. Cultural Psychology
- 67.00 Urban Management. Legislation and Zoning Codes
- 68.00 Architectural Composition
- 69.00 Landscape Architecture
- 70.00 New Technologies in Architecture
- 71.00 Specialised Design - Urban Planning 3
- 72.00 Design Synthesis Studio 3
-
- 73.10 Urban Mobility
- 73.20 Urban Regulation
- 74.10 Aesthetics in Architecture
- 74.20 Historical Building Types
- 74.30 Comparative Architecture
- 75.00 Research in Architecture
- 76.00 Marketing and Communication in Architecture
- 77.00 Urban Ecology and Urban Networks
- 78.00 Specialised Design - Landscape Design
- 79.00 Design Synthesis Studio 4
- 80.00 Practical Activity V

06

- 81.00 Practical Activity VI
- 82.00 Design Synthesis Studio 5
- 83.10 English Language
- 83.20 French Language
- 83.30 German Language
- 83.40 Administration and Public Relations
-
- 84.00 Dissertation Development
- 85.00 Development of Graduation Project
- 86.00 Advice in Technology and Structures
- 103.00 Dissertation Defence
- 104.00 Graduation Project Defence

01 year
1st semester

MATHEMATICS

Code	1.00
Semester	1
Credits	3
No. of hours/ lecture	2 / week
No. of hours/ seminar	1 /week
No. of hours project	-
Discipline type	Compulsory
Examination form	Exam

Responsible:
Assoc. Prof. PhD Marius Mihai Birou

e-mail: Marius.Birou@math.utcluj.ro

Objectives

Acquiring knowledge of analytic and differential geometry.
Obtaining the ability to generate solutions to architectural problems based on the aforementioned information.

Lecture / project contents

- C1 Coordinate system in Euclidean space. Vector calculus.
- C2 Vector algebra.
- C3 Plane in space. Line in space.
- C4 Projection. Distance. Angle.
- C5 Conics: equations in standard form. Circle. Ellipse. Parabola. Hyperbola.
- C6 Second order curves. Conics: equations in general form.
- C7 Second order surfaces. Quadrics.
- C8 Generation of surfaces.
- C9 Planar curves. Equations. Graphic representation. Tangent and normal. Contact of order k . osculating curves. Line and osculating circle.
- C10 Arc. Curvature of a planar curve. Envelope of a family of planar curves. Evolution of a planar curve.
- C11 Curves in space. Vector functions. Analytic representation. Arc. Tangent Normal plane. Osculating plane.
- C12 The Frenet Trihedron. The Frenet Formula. Curvature and torsion.
- C13 Surfaces. Analytic representation. Curves traced on a surface. Tangent plane and normal. First fundamental form.
- C14 Second fundamental form. Principal curvatures. Total curvature.

Seminar contents

Solving mathematical problems based on the courses taking place during the week.

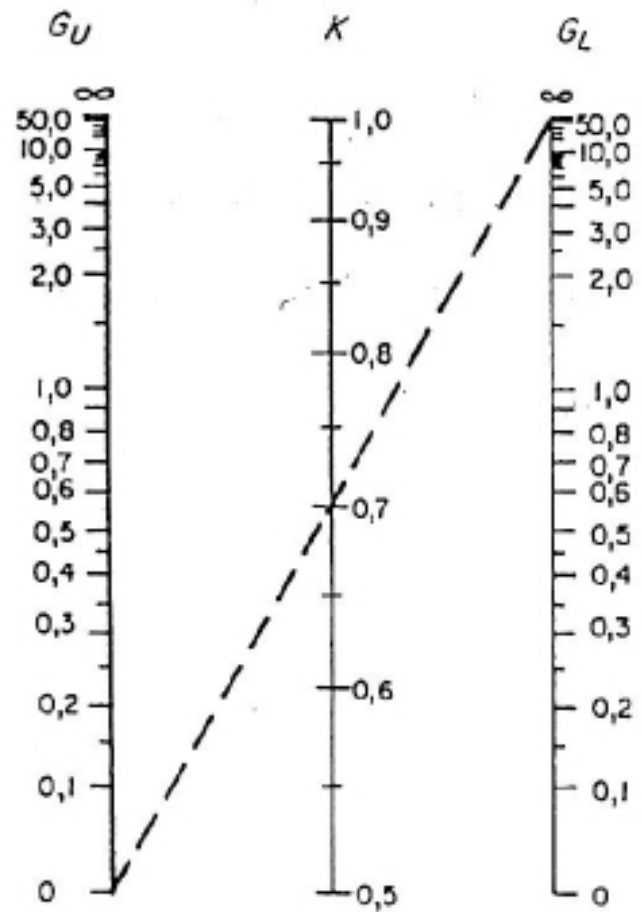
Evaluation

Formative assessment during the semester
(20% of overall grade) min. 5p/10

Written test which includes theoretical knowledge
and problem solving. (80% of overall grade) min.
5p/10.

Selected bibliography

V. MIHEȘAN, *Geometrie analitică și diferențială, teorie și probleme*, Editura Mediamira, Cluj-Napoca



1.00

HISTORY OF ANCIENT ARCHITECTURE

Code **2.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar **-**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The study of the evolution of architecture throughout Antiquity and the Middle Ages is seeking to explain the different manifestations, expressions, and representations of the architectural and artistic instances, in accordance with the economical means, the technical development, the forms of social organization, the religious beliefs, and the life philosophy.

The main goal of the discipline is to develop competences and knowledge specific to the architectural profession, by understanding the phenomenon and the architectural process, which unfolds starting from Prehistory up to the end of the 15th century.

The study is contextualized, a fact which is essential for understanding the following periods of the history of architecture.

Responsible:
Assoc. Prof. PhD Habil. Arch.
Dan-Ionuț Julean

e-mail: ionut.julean@arch.utcluj.ro

Lecture / project contents

Introduction. Prehistory. Near Eastern Civilizations -
the Architecture of Mesopotamia

Near Eastern Civilizations - the Architecture of Ancient Egypt

Mediterranean Civilizations - Cretan and Mycenaean Civilization. Greek
Civilization - Introduction. Ancient Greece - the Homeric Period and
the Archaic Period

Mediterranean Civilizations. Ancient Greece - the Classical Period

Mediterranean Civilizations. Ancient Greece - the Classical Period
(part 2) and the Hellenistic Period

Mediterranean Civilizations. Etruscan Civilization. Roman Civilization -
Ancient Rome, Building Types

Mediterranean Civilizations. Roman Civilization - Building Types (part2)

Seminar contents

-

Evaluation

1 hour and 20 minutes written exam
The answers should include both text and drawings.



Selected bibliography

FLETCHER, Banister, Sir. *A History of Architecture on the Comparative Method*. London: B.T. Batsford & New York: C. Scribner's Sons, 1896.

KOCH, Wilfried. *Baustilkunde : Das große Standardwerk zur europäischen Baukunst von der Antike bis zur Gegenwart*. München: Orbis Verlag, 1994.

MANSBRIDGE, John. *Graphic History of Architecture*. Santa Monica, CA: Hennessey & Ingalls, 1999 [1967].

2.00

THE THEORY OF ARCHITECTURE - INTRODUCTION

Code **3.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

Acquiring general knowledge about architectural theory and understanding the importance of it in architectural projects.

Responsible:
Assoc. Prof. PhD Arch. Șerban Țigănaș

e-mail:
dragos.tiganas@arch.utcluj.ro

Lecture / project contents

- C1 Introduction
- C2 The relationship between architect, engineer and the team of people
- C3 Short history of architecture
- C4 Short history of architectural theory through ideas and conventions
- C5 Fundamental architectural archetypes
- C6 Composition, scale, perspective
- C7 Architecture and other arts
- C8 The limits of architecture and the are forms of building
- C9 Digital transformation and new mathematics
- C10 Current problems of mankind and inconvenient truths
- C11 The theory of sustainability and futuristic architecture
- C12 The new role of architecture
- C13 Architecture (temporal and evergreen)
- C14 Architecture- a free profession through evolution

Seminar contents

-

Evaluation

Final exam – written test; min.5p/10.



Selected bibliography

C. DAVIES, *Thinking about Architecture, An Introduction to Architectural Theory*, Lawrence King Publishing, Londra
PIERRE VON MEISS, *De la forme au lieu + de la tectonique*, Presses polytechniques romandes, Lausanne
D. SUDJIC, *The Edifice Complex, The Architecture of Power*, Penguin Books, Londra
R. BUTLER, *Reflexion sur la question architecturale*, Les belles lettres, Paris
L. B. ALBERTI, *De re aedificatorie, On the art of building in ten books*, trad. J. Rykwert, R
T. N. LEACH, MIT Press, CambridgeRem Koolhaas, *Elements*, Marsilio, Venetia
LE CORBUSIER, *Toward an Architecture*, trad. J. Goodman, The Getty Research Institute Publications Program
I.,A. RUBY, *Re-Inventing Construction*, Ruby Press, Berlin

3.00

ENVIRONMENTAL ASPECTS IN URBAN PLANNING

Code **4.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

Developing an understanding on the complex relationship between the natural and human-transformed environment and architecture at a diverse range of territorial levels.

Aquiring essential knowledge about the history of the city and of urbanism.

Responsible:

Prof. PhD Arch. Habil.

Mihaela Ioana Maria Agachi

e-mail:

mihaela.ioana.agachi@arch.utcluj.ro

Lecture / project contents

- C1 Introduction. Basic notions about urbanism and environment
- C2 Natural limitations. Introduction.
- C3 Relief. Implications in the development of settlements
- C4 Soil. Vegetation. Water
- C5 Climate. Solar radiation. Wind. Humidity. Precipitation.
- C6 Material and energetic resources. Pollution. Social, economical and political aspects
- C7 The process of urbanisation. Artificial Environment. Morphologic elements
- C8 Morphologic elements
- C9 History of urbanism. Introduction
- C10 Urbanism in Ancient Greece
- C11 Urbanism in Ancient Rome
- C12 Urbanism and politics: Renaissance
- C13 Urbanism and politics: Baroque
- C14 Urbanism and politics: Classicisms

Seminar contents

-

Evaluation

Total: $0,8 \cdot T + 0,2 \cdot C$, notebook evaluation =C, final exam - written test, 3 theoretical questions =T
Optional homework – can replace one of the 3 theoretical questions.

Selected bibliography

J.O. SIMMONDS, *Arhitectura peisajului*, Ed. Tehnică București 1967
R. LAURIAN, *Probleme de estetica orașelor*, Ed. Tehnica București 1962
W. SCHNEIDER, *Varosok Urtol Utopiaig, Gondolat*, Budapest 1973
R. BELEA, V. FULICEA. ș.a. *Desenul în arhitectură și urbanism*, Ed. Tehnică, București 1976
Z. MIESZKOWSKY, *Elemente de proiectare în arhitectură și urbanism*, Ed. Tehnică, București 1981
J. GARNIER, G.CHABOT, *Geografia urbană*, Ed. Stințifică București 1971
N. SCHULZ, *Genius Loci - paysage, ambiance architecture*, Ed. Pierre Mardaga, Bruxelles 1981
J.L. HAROUEL, *Istoria urbanismului*, Ed. Meridiane București 2000
Legea 137/1995, legea protecției mediului, republicată în M. Of. nr. 512 partea I din 22.10.1999
Legea 226/2013 privind aprobarea OUG 164/2008 pentru modificarea și completarea OUG 195/2005 privind protecția mediului. Lege nr. 226/2013



4.00

DESCRIPTIVE GEOMETRY

Code **5.00**

Semester **1**

Credits **3**

No. of hours/ lecture **2 / week**

No. of hours/ seminar **1 / week**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

The main task of Descriptive Geometry (DG) in architectural education is to train three-dimensional thinking and to form a precise logical spatial vision, the development of effective solution strategies. At the beginning of studies, this competence is best fostered didactically by manual drawing and later by scale models, providing new means of formal concept analysis and representation. The course covers basic DG concepts, solving problems involving lines and planes in space and their relationships; axonometric projection - plan and elevation, giving students the intellectual capability of space perception and the principles of its graphical representation; locating points and tangents on solids and surfaces; and development of surfaces. The students get knowledge and skills for drawing solids, plane solid's sections and intersection. The course provides tools to imagine and represent with precision, dexterity, and virtuosity, a continually expanding expression of three-dimensional architectural form. Abstract thinking in DG is a perfect medium for design in three-dimensional space. This is best realised in topics and tasks related to architecture, thus maintaining a high motivation level, essential for successfully building up three-dimensional imagination and thinking.

Lecture / project contents

Introduction. Projection systems. Projective transformations (Homothetic, affine and perspective transformations)

Elements of descriptive geometry. Two-dimensional and three-dimensional representation of points and lines

Plane. Relative position of two different planes. Relative position of a line in relation to a plane

The methods of descriptive geometry. Changing the projection planes. Rotation. Folding. Circle in descriptive geometry

Polyhedral surfaces

Cylindro-conical surfaces

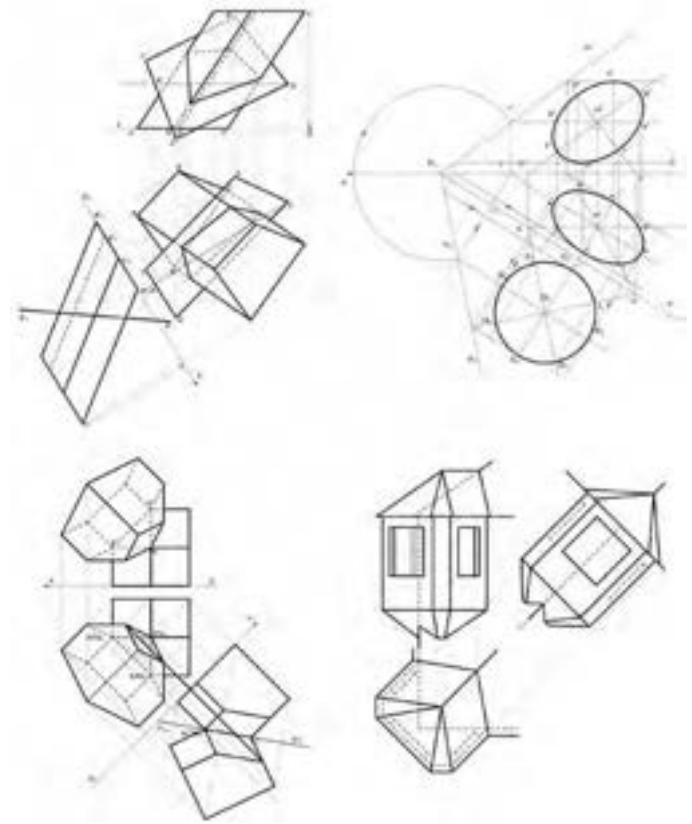
Responsible

T.Assist. PhD Arch. Ana-Maria Graur

e-mail: Anamaria.RUSU@arch.utcluj.ro

Seminar contents

- S1 Projective transformations.
- S2 Orthographic projection.
- S3 Changing the projection planes.
- S4 Rotation.
- S5 Folding.
- S6 Representation of cylindro-conical surfaces.
- S7 Planar sections and unfolding of cylindro-conical surfaces and polyhedral surfaces.



Evaluation

1 point seminar attendance + 1 point by default + 8 points exam

Selected bibliography

Felicia Olariu, Ana-Maria Graur, *Geometrie Descriptivă 1. Explicații și aplicații*. Editura U.T. Press, Cluj-Napoca, 2016.
Olariu, F. Dana Opincariu, Șerban Țigănaș, Ana-Maria Rusu, *Desen tehnic și liber: culegere de teme pentru admiterea la facultatea de arhitectură*, Editura U.T. Press, Cluj-Napoca, 2010.
Dragomir, V., s.a. *Reprezentări axonometrice în construcții și arhitectură*, Editura Tehnică București, 1970.
Gh. Tanasescu, A., *Geometrie descriptivă, probleme*, Editura Didactică și Pedagogică, 1962 și 1967.
Enache, I., s.a. *Geometrie descriptivă*, Editura Didactică și Pedagogică, București, 1979.

5.00

THE STUDY OF FORM AND VISUAL REPRESENTATION 1

Code **6.00**

Semester **1**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar **2 / biweekly**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Understanding the relationship between object and visualization.
Exploring the process of representation in relation to different techniques of portrayal.

Responsible:

Lect. PhD Leonard Vartic

e-mail: leonardvartic@yahoo.co.uk

Teaching team:

Lect. PhD Arch. Andreea Pop

T.Assist. PhD Arch. Laura Patachi

T. Assist. PhD Arch. Alina Voinea

PhDs Arch. Verona Musteață

Lecture / project contents

-

Seminar contents

Practical works on subjects connected to the Design Studio Assignments, using manual techniques, with tutors` guidance.

Evaluation

Formative assessment during the semester through regular engagement during the seminar hours.
Evaluation of final portfolio. min 5p/10

Selected bibliography

- R. ARNHEIM, *Arta și percepția vizuală*, Editura Meridiane, București, 1979
R. ARNHEIM, *Forța centrului vizual*, Editura Meridiane, București, 1995
J. BALTRUSAITIS, *Aberații - legende ale formelor*, Ed. Meridiane, București, 1972
J. BALTRUSAITIS, *Formări, deformări*, Editura Meridiane, București, 1989
R. BERGER, *Artă și comunicare*, Editura Meridiane, București, 1976
E. H. GOMBRICH, *Artă și iluzie*, Ed. Meridiane, București, 1973
D. HOCKNEY, *Secret Knowledge, Rediscovering the lost techniques of the Old Masters*, Editura Thames & Hudson, London, 2001
R. HUYGHE, *Puterea imaginii*, Ed. Meridiane, București, 1971
J. ITTEN, *Art de la couleur (édition intégrale)*, Ed. Dessain et Tolra, Paris, 1977
N. KNOBLER, *Dialogul vizual*, Ed. Meridiane, București, 1983



6.00

ARCHITECTURAL DESIGN STUDIO 1

Code **7.00**

Semester **1**

Credits **13**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **11/week**

Discipline type **Compulsory**

Examination form **Colloquim**

Objectives

- understanding the qualities and configurations of architectural spaces through drawing, sketching and documenting through drawing
- practicing compositions and architectural concepts through drawings and models
- discovering the interaction between the architectural object and the natural context
- developing creativity in the process of designing
- practicing architectural graphics and poster presentations
- learning to build models for architectural objects

Responsible
Assoc. Prof. PhD Arch.
Dana Sorina Opincariu

e-mail: dana.opincariu@Arch.utcluj.ro

Teaching Team
Lect. PhD Arch. Andreea Pop
T. Assist. PhD Arch. Laura Patachi
T.Assist. PhD Arch. PhD Alina Voinea
Arch. PhD Silviu Borş
Arch. PhD Răzvan Potîng
Arch. PhDs Verona Musteață
Arch. PhDs Adrian Niculaș
Arch. PhDs Marius Păsculescu

Lecture / project contents

Project: Pavilion for architecture in a park

Phase A: Documenting, analysing and representing an existing pavilion

Phase B: Developing the concept, the project and the scale model for an original pavilion

Seminar contents

-

Evaluation

The evaluation and the notation of the projects are made by the responsible professors.



Selected bibliography

Ching, Francis D. K. *Architecture, Form, Space and Order*, ed. a 3-a. Hoboken, NJ: John Wiley & Sons, 2007
Ching, Francis D.K. *Architectural graphics*, ed. a 5-a Hoboken, NJ : John Wiley and Sons, 2009
Jodidio, Philip. *Serpentine Gallery Pavilions*. Köln: Taschen, 2011
McLeod, Virginia, *Detail in contemporary landscape architecture*. London : Laurence King Publishing, 2008
Zumthor, Peter, *Atmospheres : architectural environments ; surrounding objects*. Basel : Birkhäuser, 2006

7.00

FOREIGN LANGUAGES 1 - ENGLISH

Code	8.10
Semester	1
Credits	2
No. of hours/ lecture	-
No. of hours/ seminar	2 / week
No. of hours project	-
Discipline type	Compulsory
Examination form	Colloquium

Objectives

Development of oral communication skills for professional technical context.

Development of lexical, grammatical and discursive knowledge in technical language.

Developing the knowledge to understand, transmit and evaluate an oral message in a professional technical context.

Responsible
Assoc. Prof. PhD. Sanda Paduretu
e-mail: Sanda.Paduretu@lang.utcluj.ro

Lecture / project contents

-

Seminar contents

1. Organizing of study groups - placement test
2. Personal coordinates: the business card, personal motivation
3. Higher technical education and educational systems
4. Notions of mathematics: calculations; bodies and figures
5. Forms and dimensions
6. The architect; training, responsibilities, skills
7. Elements of culture and civilization; Geography
8. Situation in time
9. Placement in space
10. Visiting a city where the taught language is spoken
11. Presentation of architectural monuments I
12. Presentation of architectural monuments II
13. Evaluation: written test
14. Final evaluation

Evaluation

1. Written test – 70%
2. Oral test – 10%
3. Evaluation during the semester – 20%

To attend the tests, a presence in min. 80% of the seminars is required

Selected bibliography

Glendinning, E.H., Technology 1, Oxford University Press, 2007.
Pădurețu, S. – English for Architecture, Ed. Risoprint, Cluj-Napoca, 2015.
Ibbotson, M. - Cambridge English for Engineering, Cambridge University Press, 2009.



FOREIGN LANGUAGES 1 - FRENCH

Code	8.20
Semester	1
Credits	2
No. of hours/ lecture	-
No. of hours/ seminar	2 / week
No. of hours project	-
Discipline type	Compulsory
Examination form	Colloquium

Objectives

Development of oral communication skills for professional technical context.

Development of lexical, grammatical and discursive knowledge in technical language.

Developing the knowledge to understand, transmit and evaluate an oral message in a professional technical context.

Responsible
Lect. dr. Aurel Bărbîntă

E-mail:
Aurel.Barbinta@lang.utcluj.ro

Lecture / project contents

-

Seminar contents

1. Organizing of study groups - placement test
2. Personal coordinates: the business card, personal motivation
3. Higher technical education and educational systems
4. Notions of mathematics: calculations; bodies and figures
5. Forms and dimensions
6. The architect; training, responsibilities, skills
7. Elements of culture and civilization; Geography
8. Situation in time
9. Placement in space
10. Visiting a city where the taught language is spoken
11. Presentation of architectural monuments I
12. Presentation of architectural monuments II
13. Evaluation: written test
14. Final evaluation

Evaluation

1. Written test – 70%
2. Oral test – 10%
3. Evaluation during the semester – 20%

To attend the tests, a presence in min. 80% of the seminars is required



Selected bibliography

Forna, Adina-Irina, *Le français pour les étudiants en architecture et en génie civil*, Cluj-Napoca, UTPRESS, 2017.

Vignozii, Alessandro, *Petites et grandes constructions, avec les illustrations de Giuseppe Arrighi, Giovanni Bernardi, Simone Boni, Lorenzo Cecchi, L.R. Galante, Lorentzo Pieri, Ivan Stalio, Stefano Tartarotti*, traduction Maria Grazzini, La Compagnie du Livre, 1995.

Merveilles de l'architecture, texte original de Brian Williams, adaptation française de Jean Bertrand, Paris, Gründ, coll. « Comprendre », 1993.

FOREIGN LANGUAGES 1 - GERMAN

Code **8.30**

Semester **1**

Credits **2**

No. of hours/ lecture **-**

No. of hours/ seminar **2 / week**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Development of oral communication skills for professional technical context.

Development of lexical, grammatical and discursive knowledge in technical language.

Developing the knowledge to understand, transmit and evaluate an oral message in a professional technical context.

Responsible:

Asist. CDA Miruna Opris

E-mail:

Miruna.Opris@lang.utcluj.ro

Lecture / project contents

-

Seminar contents

1. Organizing of study groups - placement test
2. Personal coordinates: the business card, personal motivation
3. Higher technical education and educational systems
4. Notions of mathematics: calculations; bodies and figures
5. Forms and dimensions
6. The architect; training, responsibilities, skills
7. Elements of culture and civilization; Geography
8. Situation in time
9. Placement in space
10. Visiting a city where the taught language is spoken
11. Presentation of architectural monuments I
12. Presentation of architectural monuments II
13. Evaluation: written test
14. Final evaluation

Evaluation

1. Written test – 70%
2. Oral test – 10%
3. Evaluation during the semester – 20%

To attend the tests, a presence in min. 80% of the seminars is required



Selected bibliography

Dallapiazza/von Jahn/Schönherr - *Tangram. Kursbuch für Deutsch als Fremdsprache*. München: Hueber Verlag, 2002.

Opris, M. - *Deutsch in Studium und Wissenschaft*, UTPRESS, Cluj-Napoca 1993.

FOREIGN LANGUAGES 1 - ITALIAN

Code **8.40**

Semester **1**

Credits **2**

No. of hours/ lecture **-**

No. of hours/ seminar **2 / week**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Development of oral communication skills for professional technical context.

Development of lexical, grammatical and discursive knowledge in technical language.

Developing the knowledge to understand, transmit and evaluate an oral message in a professional technical context.

Responsible:

Conf. Dr. Angelica Căpraru

E-mail:

Angela.Capraru@lang.utcluj.ro

Lecture / project contents

-

Seminar contents

1. Organizing of study groups - placement test
2. Personal coordinates: the business card, personal motivation
3. Higher technical education and educational systems
4. Notions of mathematics: calculations; bodies and figures
5. Forms and dimensions
6. The architect; training, responsibilities, skills
7. Elements of culture and civilization; Geography
8. Situation in time
9. Placement in space
10. Visiting a city where the taught language is spoken
11. Presentation of architectural monuments I
12. Presentation of architectural monuments II
13. Evaluation: written test
14. Final evaluation

Evaluation

1. Written test – 70%
2. Oral test – 10%
3. Evaluation during the semester – 20%

To attend the tests, a presence in min. 80% of the seminars is required



Selected bibliography

Căpraru, A. - *L italiano per gli ingeneri*, UTPRESS, Cluj-Napoca, 2003.
La Grassa, M. - *L italiano all'università*, Edilingua, Perugia, 2011.

PHYSICAL EDUCATION 1

Code **9.00**

Semester **1**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar **2 / week**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Development of motor knowledge, skills and abilities. Teaching means and methods for harmonious and balanced physical development. Developing the concept of fair-play in sports and social activities.

Responsible:

Assoc. Prof. PhD. Alina Rusu

Lect. PhD. Mihai Olanescu

Lect. PhD. Radu Sabau

Lect. PhD. Vlad Grosu

T. Assist. PhD. Adrian Suciu

Lecture / project contents

-

E-mail:

Alina.Rusu@mdm.utcluj.ro

Mihai.Olanescu@mdm.utcluj.ro

Seminar contents

1. Informing students about the requirements of the discipline. Testing the level of physical ability of students. Accommodating students with physical effort.
2. Teaching basic principles and technics in ball games and swimming.

Evaluation

A minimum presence of 10/14 seminars is required. The final test consists in completing a series of exercises in a specified order and time.

Selected bibliography

Curs de Educație fizică – Litografiat UTC-N.
Dezvoltare fizică generală pentru studenți – UTC-N.
Cultură fizică pentru tineret – UT.PRESS.

01 year
2nd semester

PERSPECTIVES

Code **10.00**

Semester **2**

Credits **3**

No. of hours/ lecture **2 / week**

No. of hours/ seminar **1 / week**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Exam**

Objectives

Acquiring knowledge about Perception and Visual Communication; understanding the methods studied during the lectures and their importance in architectural visualization and obtaining the ability to use them in architectural representation.

Responsible:

Assoc. Prof. PhD Arch.

Dana Sorina Opincariu

e-mail: dana.opincariu@Arch.utcluj.ro

Lecture / project contents

- C1 Introduction. Perception (P). Representation (R)
- C2 Communication (C)
- C3 The art of perspective
- C4 The Brunelleschi Method
- C5 Dependent method perspective to the vertical plane FF90/OP, step-by-step
- C6 Dependent method perspective to the vertical plane OF, FP, FM, step-by-step
- C7 Free method perspective to the vertical plane
- C8 Free method perspective to the vertical plane, step-by-step
- C9 History of representation through perspective
- C10 Aerial perspective
- C11 Photography and restitution of perspective
- C12 Shadows and mirroring through perspective
- C13 Architectural visualisation through perspective
- C14 The stenographic art - the language of visual communication. Recapitulation

Seminar contents

Practical exercises, applications, perspective drawings.

Evaluation

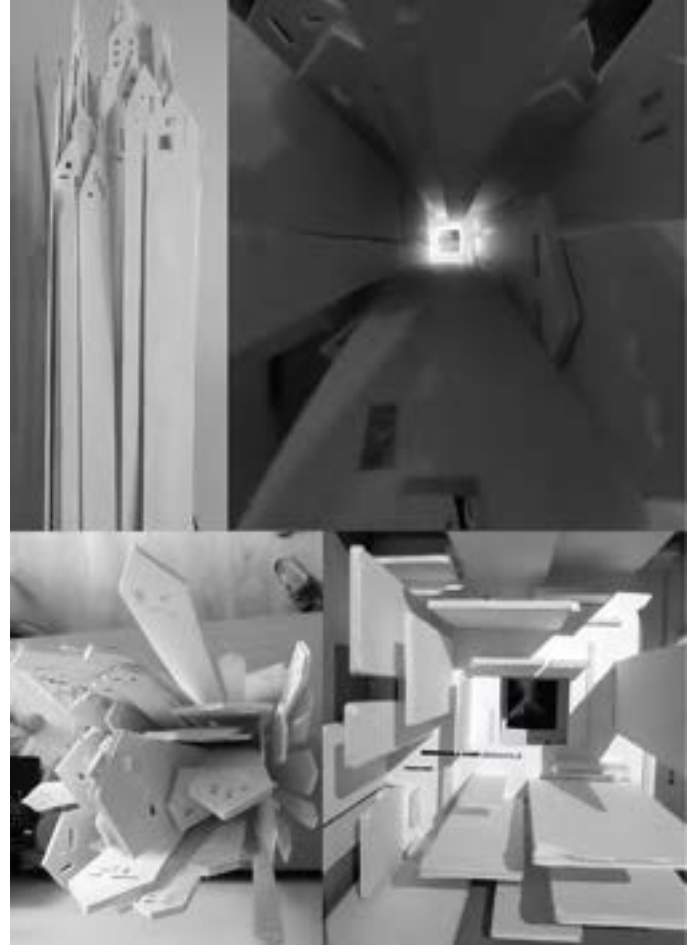
Portfolio - max 3p/10.

Final exam – written test, perspective drawing- max 7p/10.

Requires attendance to lectures and seminars. (min 50%)

Selected bibliography

- R. ARNHEIM, *Arta si perceptia vizuala*, Ed. Polirom-1974, 2004, 2011
J. BALTRUSAITIS, *Anamorfoze*, Ed. Meridiane, Bucuresti, 1973
D.K.F. CHING, *Design Drawing*, Ed. John Wiley& Sons, USA, 1998
B. DONNADIEU, *L'Apprentissage du regard*, Ed. La Villette, Paris, 2002
C. DUMITRESCU, *Perspectiva*, Timisoara, 2002
Z. DUMITRESCU, *Ars Perspectivae*, Bucuresti, 2002
Z. DUMITRESCU, *Caiete de perspectiva*, Ed. Bucuresti, 2002
E.H. GOMBRICH, *Art & Illusion*, Ed. Phaidon, 1960, 1994
R. HUYGHE, *Dialog cu vizibilul*, Ed. Meridiane, 1981
I. IONESCU, *Perspectiva-Instrument de proiectare*, Ed. Universitara Ion Mincu-EUIM. 2009
A. PALLADIO, *Les Quatre Livres de L'Architecture*, Ed. Flammarion, France, 1997



10.00

HISTORY OF MEDIAEVAL ARCHITECTURE

Code **11.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The study of the evolution of architecture throughout Antiquity and the Middle Ages is seeking to explain the different manifestations, expressions, and representations of the architectural and artistic instances, in accordance with the economical means, the technical development, the forms of social organization, the religious beliefs, and the life philosophy.

The main goal of the discipline is to develop competences and knowledge specific to the architectural profession, by understanding the phenomenon and the architectural process, which unfolds starting from Prehistory up to the end of the 15th century.

The study is contextualized, a fact which is essential for understanding the following periods of the history of architecture.

Responsible:
Assoc. Prof. PhD Habil. Arch.
Dan-Ionuț Julean

e-mail: ionut.julean@arch.utcluj.ro

Lecture / project contents

The Preconditions of Medieval Art. Paleochristianity. The Eastern Roman Empire, the Byzantine Style

The Eastern Roman Empire - the Byzantine Empire, the Byzantine Style (part 2)

The Middle Ages in Central and Western Europe. Pre-Romanesque and Romanesque Architecture

The Middle Ages in Central and Western Europe. Romanesque Architecture in France and Outside France

The Middle Ages in Central and Western Europe. Gothic Architecture - an Overview

The Middle Ages in Central and Western Europe. Gothic Architecture in France

The Middle Ages in Central and Western Europe. Gothic Architecture Outside France

Seminar contents

-

Evaluation

1 hour and 20 minutes written exam
The answers should include both text and drawings.



Selected bibliography

FLETCHER, Banister, Sir. *A History of Architecture on the Comparative Method*. London: B.T. Batsford & New York: C. Scribner's Sons, 1896.

KOCH, Wilfried. *Baustilkunde : Das große Standardwerk zur europäischen Baukunst von der Antike bis zur Gegenwart*. München: Orbis Verlag, 1994.

MANSBRIDGE, John. *Graphic History of Architecture*. Santa Monica, CA: Hennessey & Ingalls, 1999 [1967].

11.00

URBAN MORPHOLOGY

Code **12.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar **-**

No. of hours project **-**

Discipline type **Cc mpulsory**

Examination form **Exam**

Objectives

Learning and understanding the basic concepts, theories and methods that is specific in contemporary urban planning. Understanding the urban space as an space of a community with specific identity.

Responsible:

Prof. PhD Arch. Habil.

Mihaela Ioana Maria Agachi

e-mail:

mihaela.ioana.agachi@arch.utcluj.ro

Lecture / project contents

- C1 Urban Demographic Explosion. The genesis of the contemporary urban planning
- C2 Introduction to the morphological approach of urban space.
- C3 The neo-conservative urban planning
- C4 The humanist current. The cultural movement 1
- C5 The humanist current. The cultural movement 2
- C6 The humanist current. The cultural movement 3
- C7 Anthropological Urbanism
- C8 The Satellite City
- C9 The triumph of The Progressive Urban Planning. Le Corbusier and The Radiant City
- C10 The Charter of Athena
- C11 The expansion of the existing cities and the first reactions to The Functionalist Current
- C12 New utopia: imagining the cities of the future. The urban Gigantism
- C13 New trends in city development in the last decades of the 20th Century. Returning to the traditional
- C14 The Friendly Urban Planning. Conclusions

Seminar contents

-



Evaluation

Written exam, containing 7 questions of different complexity. The homework is optional and it can replace 3 of the exam questions.

Selected bibliography

- F. CHOAY, *L'urbanisme, Utopies et réalités*, Ed. du Seuil, Paris 1965
P. PANERAI, J. CHASTEX, J.-C. DEPAULE, *Forme urbaine - de l'ilot à la barre*, Ed. Dunod, Paris 1977
K. SPIRO, *The City Shaped, Urban Patterns and Meanings Through History*, Thames and Hudson Ltd, London 1991
P. HALL, *Orașele de mâine*, Ed. All Educational, București 1999
T. DECKE, *The modern city revisited*, Spon Press, N.Y 2000
J. L. HAROUËL, *Istoria urbanismului*, Ed. Meridiane București 2000
G.M. CANTACUZINO, *Despre o estetică a reconstrucției*, Ed. Paideea, București 2001

12.00

BUILDING MATERIALS

Code **13.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

Understanding the correlation between materials and architecture; acquiring the ability to design architecture while considering the physical aspect of it.

Responsible:

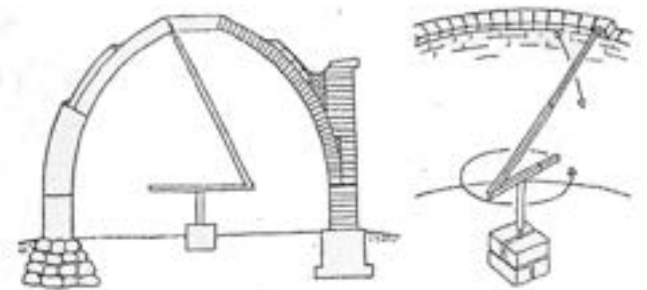
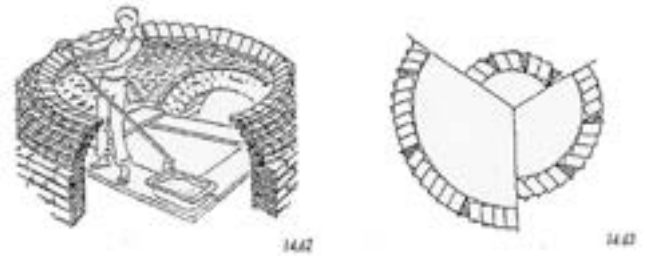
T. Assist. PhD Arch. Daniel Șerban
e-mail: daniel.serban@Arch.utcluj.ro

Lecture / project contents

- C1 Introduction. Types of materials used in construction. Usage. Financial value. Ecological footprint. Geographical availability.
- C2 Context.
- C3 Basic notions of mechanics and physical characteristics of
- C4 different materials.
- C5 Wood.
- C6 Stone.
- C7 Clay.
- C8 Ceramic.
- C9 Mineral binders.
- C10 Concrete.
- C11 Glass.
- C12 Metals.
- C13 Plastic and synthetic materials. Bituminous materials. Fibres. Mineral oils. Organic materials.
- C14 Composite materials. Recapitulation.

Seminar contents

-



Evaluation

Written test of 3 questions; min.5p/10.

Requires theoretical knowledge, technical vocabulary and drawings.

Selected bibliography

- E. ALLEN , J. IANO, *Fundamentals of Building Construction: Materials and Methods*, 6th Edition, Hoboken, New Jersey, John Wiley & Sons, 2013
- C. BĂRBULESCU, *Integrare tehnologică în arhitectura contemporană*, Cluj-Napoca, Presa Universitară Clujeană, 2002
- F. D. K. Ching, *A Visual Dictionary of Architecture*, New York, John Wiley & Sons, 1995
- A. DEPLAZES, Ed., *Constructing Architecture. Materials, Processes, Structures. A Handbook*, Basel, Birkhäuser, 2005
- D. HARDT, *Materiale pentru construcții și finisaje*, București, Editura Didactică și Pedagogică, 1976
- M. HEGGER, et al., *Construction Materials Manual*, München, Edition Detail, (Basel, Birkhäuser) 2006
- M. C. TORRICELLI, et al., *Materiali e tecnologie dell'architettura*, Roma / Bari, Editori Laterza 2004 (2001)

13.00

THE STUDY OF FORM AND VISUAL REPRESENTATIONS 2

Code **14.00**

Semester **2**

Credits **4**

No. of hours/ lecture -

No. of hours/ seminar **4 / week**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Encouraging creativity while designing the architectural space.
Understanding the relationship between means of expression and ideas, between subjects and representation.

Responsible:

Lect.PhD Arch. Leonard Vartic

e-mail: leonardvartic@yahoo.co.uk

Teaching team:

Lect.PhD Arch. Andreea Pop

T.Assist.PhD Arch. Laura Patachi

T. Assist. PhD Arch. Alina Voinea

PhDs Arch. Verona Musteață

Lecture / project contents

-

Seminar contents

- S1 Creative exercise. Collage technique.
- S2 Creative exercise. Minimalistic volumes.
- S3 Basso-rilievo.
- S4 Creating modular volumes out of paper.
- S5 Creating modular volumes out of wire and rope.
- S6 Creating modular volumes out of clay.
- S7 Installation. Assembly. Teamwork.
Compensatory seminar.

Evaluation

Formative assessment during the semester through regular engagement during the seminar hours.
Evaluation of final portfolio. min 5p/10

Selected bibliography

- R. ARNHEIM, *Artă și percepția vizuală*, Editura Meridiane, București, 1979
- R. ARNHEIM, *Forța centrului vizual*, Editura Meridiane, București, 1995
- J. BALTRUSAITIS, *Aberații - legende ale formelor*, Ed. Meridiane, București, 1972
- J. BALTRUSAITIS, *Formări, deformări*, Editura Meridiane, București, 1989
- R. BERGER, *Artă și comunicare*, Editura Meridiane, București, 1976
- E. H. GOMBRICH, *Artă și iluzie*, Ed. Meridiane, București, 1973
- D. HOCKNEY, *Secret Knowledge, Rediscovering the lost techniques of the Old Masters*, Editura Thames & Hudson, London, 2001
- R. HUYGHE, *Puterea imaginii*, Ed. Meridiane, București, 1971
- J. ITTEN, *Art de la couleur (édition intégrale)*, Ed. Dessain et Tolra, Paris, 1977
- N. KNOBLER, *Dialogul vizual*, Ed. Meridiane, București, 1983



14.00

ARCHITECTURAL DESIGN STUDIO 2

Code **15.00**

Semester **2**

Credits **12**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **10/week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Understanding the spatial layout and function of a dwelling

Deciphering the way of representation of the architectural project

Practicing polychrome drawing technique for the presentation of projects

The study of the interaction between the architectural object and its context

Practicing architectural model building

Responsible
Assoc. Prof. PhD Arch.
Dana Sorina Opincariu

e-mail: dana.opincariu@Arch.utcluj.ro

Teaching Team

Lect. PhD Arch. Andreea Pop
T. Assist. PhD Arch. Laura Patachi
T.Assist. PhD Arch. PhD Alina Voinea
Arch. PhD Silviu Borş
Arch. PhD Răzvan Potîng
Arch. PhDs Verona Musteață
Arch. PhDs Adrian Niculaș
Arch. PhDs Marius Păsculescu

Lecture / project contents

Minimal holiday house on an imaginary given site.

The project develops according to the design assignment in 3 phases:

1. Gathering data for the project
2. Developing the concept for the project
3. Detailing the solution and project presentation

Seminar contents

-

Evaluation

The evaluation and the notation of the projects are made by the responsible professors.



Selected bibliography

- A. BAHAMON, ed. *Houses, Casas / Häuser*. Barcelona: Könemann, 2005 (517.479)
R. BARRENECHE, *Modern House Three*. London: Phaidon, 2006 (520.549)
C. BROTO, *Architectural design. Houses*. Barcelona: Monsa, 1999 (501.023)
C. BROTO, *Architectural design. New Country Houses*. Barcelona: Monsa, 2001 (501.032)
P. CHUECO, *Urban Houses*. Barcelona: Links, 2008 (531.013)
A. CORCUERA, *Contemporary Houses*. Barcelona: Könemann, 2006 (520.539)
F. IONESCU, și V. NĂSTASE, *Proiectarea Mobilei și Arhitectura Interioarelor*. București: Editura Didactică și Pedagogică, 1970 (160.936)
C. MELHUIH, *Modern House 2*. London: Phaidon, 2004 (520.548)
NEUFERT. *Manualul Arhitectului: Elemente de proiectare și de construcție*. Miercurea Ciuc: Alutus, 2004 (537.936)
R. PATRULIUS, *Locuința în timp și spațiu*. București: Editura Tehnică, 1975 (207.400)

15.00

FOREIGN LANGUAGES 2 - ENGLISH

Code **16.10**

Semester **2**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar **2/week**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Development of language and communication skills in a foreign language for professional use.

Assimilation of the basic lexicon in the fields of interest and related to architecture. Effective use of language and communication skills in foreign languages.

Responsible

Assoc. Prof. PhD. Sanda Paduretu

e-mail: Sanda.Paduretu@lang.utcluj.ro

Lecture / project contents

-

Seminar contents

1. The forces in a structure. Types of forces. 2. Buildings and structures 3. Architectural styles and house types 4. The elements of the building. Foundations and walls 5. Topographic measurements 6. Construction materials: traditional and modern 7. The seven wonders of the ancient world. Shapes and dimensions 8. Architectural elements: arches and windows 9. Gates and roofs 10. Vaults and domes 11. Styles and ornaments 12. The history of architecture. The first civilizations 13. Architecture in the Middle Ages 14. Gothic style 15. Renaissance in Europe 16. Baroque architecture 17. Industrial era 18. Modern architecture 19. International style 20. Cities of the twentieth century 21. Contemporary architecture 22. Architecture of the future 23-25. World famous constructions I-III 26. The project and its implementation 27. Evaluation – written test.

Evaluation

1. Written test – 70%
2. Oral test – 10%
3. Evaluation during the semester – 20%

To attend the tests, a presence in min. 80% of the seminars is required

Selected bibliography

Glendinning, E.H., Technology 1, Oxford University Press, 2007.
Pădurețu, S. – English for Architecture, Ed. Risoprint, Cluj-Napoca, 2015.
Ibbotson, M. - Cambridge English for Engineering, Cambridge University Press, 2009.



FOREIGN LANGUAGES 2 - FRENCH

Code **16.20**
Semester **2**
Credits **2**
No. of hours/ lecture -
No. of hours/ seminar **2/week**
No. of hours project -
Discipline type **Compulsory**
Examination form **Colloquium**

Objectives

Development of oral communication skills for professional technical context.

Development of lexical, grammatical and discursive knowledge in technical language.

Developing the knowledge to understand, transmit and evaluate an oral message in a professional technical context.

Responsible
Lect. dr. Aurel Bărbîntă

E-mail:
Aurel.Barbinta@lang.utcluj.ro

Lecture / project contents

-

Seminar contents

1. The forces in a structure. Types of forces. 2. Buildings and structures 3. Architectural styles and house types 4. The elements of the building. Foundations and walls 5. Topographic measurements 6. Construction materials: traditional and modern 7. The seven wonders of the ancient world. Shapes and dimensions 8. Architectural elements: arches and windows 9. Gates and roofs 10. Vaults and domes 11. Styles and ornaments 12. The history of architecture. The first civilizations 13. Architecture in the Middle Ages 14. Gothic style 15. Renaissance in Europe 16. Baroque architecture 17. Industrial era 18. Modern architecture 19. International style 20. Cities of the twentieth century 21. Contemporary architecture 22. Architecture of the future 23-25. World famous constructions I-III 26. The project and its implementation 27. Evaluation – written test.

Evaluation

1. Written test – 70%
2. Oral test – 10%
3. Evaluation during the semester – 20%

To attend the tests, a presence in min. 80% of the seminars is required



Selected bibliography

Forna, Adina-Irina, *Le français pour les étudiants en architecture et en génie civil*, Cluj-Napoca, UTPRESS, 2017.

Vignozii, Alessandro, *Petites et grandes constructions, avec les illustrations de Giuseppe Arrighi, Giovanni Bernardi, Simone Boni, Lorenzo Cecchi, L.R. Galante, Lorentzo Pieri, Ivan Stalio, Stefano Tartarotti*, traduction Maria Grazzini, La Compagnie du Livre, 1995.

Merveilles de l'architecture, texte original de Brian Williams, adaptation française de Jean Bertrand, Paris, Gründ, coll. « Comprendre », 1993.

16.20

FOREIGN LANGUAGES 2 - GERMAN

Code **16.30**

Semester **2**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar **2/week**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Development of oral communication skills for professional technical context.

Development of lexical, grammatical and discursive knowledge in technical language.

Developing the knowledge to understand, transmit and evaluate an oral message in a professional technical context.

Responsible:

Asist. CDA Miruna Opris

E-mail:

Miruna.Opris@lang.utcluj.ro

Lecture / project contents

-

Seminar contents

1. The forces in a structure. Types of forces. 2. Buildings and structures 3. Architectural styles and house types 4. The elements of the building. Foundations and walls 5. Topographic measurements 6. Construction materials: traditional and modern 7. The seven wonders of the ancient world. Shapes and dimensions 8. Architectural elements: arches and windows 9. Gates and roofs 10. Vaults and domes 11. Styles and ornaments 12. The history of architecture. The first civilizations 13. Architecture in the Middle Ages 14. Gothic style 15. Renaissance in Europe 16. Baroque architecture 17. Industrial era 18. Modern architecture 19. International style 20. Cities of the twentieth century 21. Contemporary architecture 22. Architecture of the future 23-25. World famous constructions I-III 26. The project and its implementation 27. Evaluation – written test.

Evaluation

1. Written test – 70%
2. Oral test – 10%
3. Evaluation during the semester – 20%

To attend the tests, a presence in min. 80% of the seminars is required



Selected bibliography

Dallapiazza/von Jahn/Schönherr - *Tangram. Kursbuch für Deutsch als Fremdsprache*. München: Hueber Verlag, 2002.

Opris, M. - *Deutsch in Studium und Wissenschaft*, UTPRESS, Cluj-Napoca 1993.

16.30

FOREIGN LANGUAGES 2 - ITALIAN

Code **16.40**

Semester **2**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar **2/week**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Development of oral communication skills for professional technical context.

Development of lexical, grammatical and discursive knowledge in technical language.

Developing the knowledge to understand, transmit and evaluate an oral message in a professional technical context.

Responsible:

Conf. Dr. Angelica Căpraru

E-mail:

Angela.Capraru@lang.utcluj.ro

Lecture / project contents

-

Seminar contents

1. The forces in a structure. Types of forces. 2. Buildings and structures 3. Architectural styles and house types 4. The elements of the building. Foundations and walls 5. Topographic measurements 6. Construction materials: traditional and modern 7. The seven wonders of the ancient world. Shapes and dimensions 8. Architectural elements: arches and windows 9. Gates and roofs 10. Vaults and domes 11. Styles and ornaments 12. The history of architecture. The first civilizations 13. Architecture in the Middle Ages 14. Gothic style 15. Renaissance in Europe 16. Baroque architecture 17. Industrial era 18. Modern architecture 19. International style 20. Cities of the twentieth century 21. Contemporary architecture 22. Architecture of the future 23-25. World famous constructions I-III 26. The project and its implementation 27. Evaluation – written test.

Evaluation

1. Written test – 70%
2. Oral test – 10%
3. Evaluation during the semester – 20%

To attend the tests, a presence in min. 80% of the seminars is required

Selected bibliography

Căpraru, A. - *L italiano per gli ingeneri*, UTPRESS, Cluj-Napoca, 2003.
La Grassa, M. - *L italiano all'università*, Edilingua, Perugia, 2011.



PHYSICAL EDUCATION 2

Code **17.00**

Semester **2**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar **2 / week**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Development of motor knowledge, skills and abilities. Teaching means and methods for harmonious and balanced physical development. Developing the concept of fair-play in sports and social activities.

Responsible:

Assoc. Prof. PhD. Alina Rusu

Lect. PhD. Mihai Olanescu

Lect. PhD. Radu Sabau

Lect. PhD. Vlad Grosu

T. Assist. PhD. Adrian Suciu

Lecture / project contents

-

E-mail:

Alina.Rusu@mdm.utcluj.ro

Mihai.Olanescu@mdm.utcluj.ro

Seminar contents

1. Informing students about the requirements of the discipline. Testing the level of physical ability of students. Accommodating students with physical effort.
2. Teaching basic principles and technics in ball games and swimming.

Evaluation

A minimum presence of 10/14 seminars is required. The final test consists in completing a series of exercises in a specified order and time.

Selected bibliography

Curs de Educație fizică – Litografiat UTC-N.
Dezvoltare fizică generală pentru studenți – UTC-N.
Cultură fizică pentru tineret – UT.PRESS.

17.00

PRACTICAL ACTIVITY I

Code **18.00**

Semester **2**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **24**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Acquiring the theoretical and practical skills required for a measured survey of an architectural object and its representation principles and techniques. Experimenting with specific architectural surveying tools and understanding the relationship between the purpose and the scale of representation and its specific graphic characteristics.

Responsible

Assoc. Prof. PhD Arch.

Dana Sorina Opincariu

e-mail: dana.opincariu@arch.utcluj.ro

Teaching Team

Lect. PhD Arch. Andreea Moțu

T. Assist. PhD Arch. Laura Patachi

Arch. PhD Silviu Borș

Arch. PhDs Adrian Niculaș

Arch. PhDs Marius Păsculescu

Arch. PhD Răzvan Potîng

Arch. PhD Alina Voinea

Lecture / project contents

Creating the student portfolio to include the projects and other creative assignments elaborated during the first two semesters. The portfolio will then be continuously updated in the framework of the following study years' Practical activities.

Seminar contents

Elaborating a measured survey for an existing architectural object. Students usually work in teams of three to five persons.



Evaluation

Portfolio assessment including the notes written on the field and final drawings.



Selected bibliography

F. CHING, Francis D.K., *Architectural Graphics*, John Wiley & Sons, Inc., New York, 2003;
MILEA, Andreea, POP, Dana, *Despre releveu. Practici de vară în Házsongárd*, U.T.Press, Cluj-Napoca, 2012;
NEUFERT, Ernst & Peter, *Architects' Data*, Blackwell Science, Oxford, 2000;

18.00

02_{year}
1st semester

HISTORY OF RENAISSANCE AND BAROQUE ARCHITECTURE

Code **17.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

By acquiring general information about the architectural development during the Renaissance and Baroque, about the famous architects and fundamental notions from this period, students will be able to recognize the particularities of the architectural styles, the geographical area, and to evaluate the quality of the architectural object as well.

Responsible:

Prof. PhD Arch. Habil. Virgil Pop

e-mail: arch.virgil.pop@gmail.com

Lecture / project contents

- C1 The beginning of Renaissance
- C2 The works of Brunelleschi
- C3 The works of Alberti
- C4 The early Renaissance in Rome, urban transformations during the late Renaissance
- C5 Villa in the Renaissance period
- C6 The Renaissance architecture in North of Alps and in Transylvania
- C7 Introduction in Baroque
- C8 The late work of Michelangelo Bernini Boromini
- C9 The urban Baroque palaces in Rome
- C10 The transformations of the church during the Baroque period
- C11 The re-use of the Egyptian obelisks during the Baroque period
- C12 The Baroque urban planning in the 17th century
- C13 Baroque in Germany and Hungary
- C14 Baroque in Transylvania and Baroque style

Seminar contents

-

Evaluation

Final exam – written test, min.5p/10.

Selected bibliography

Synthesis work

Specific bibliography for each course



17.00

URBAN MORPHOLOGY

Code **18.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Cc mpulsory**

Examination form **Exam**

Objectives

Learning and understanding the basic concepts, theories and methods that is specific in contemporary urban planning. Understanding the urban space as an space of a community with specific identity.

Responsible:
Prof. PhD Arch. Habil.
Mihaela Ioana Maria Agachi

e-mail:
mihaela.ioana.agachi@arch.utcluj.ro

Lecture / project contents

- C1 Urban Demographic Explosion. The genesis of the contemporary urban planning
- C2 Introduction to the morphological approach of urban space.
- C3 The neo-conservative urban planning
- C4 The humanist current. The cultural movement 1
- C5 The humanist current. The cultural movement 2
- C6 The humanist current. The cultural movement 3
- C7 Anthropological Urbanism
- C8 The Satellite City
- C9 The triumph of The Progressive Urban Planning. Le Corbusier and The Radiant City
- C10 The Charter of Athena
- C11 The expansion of the existing cities and the first reactions to The Functionalist Current
- C12 New utopia: imagining the cities of the future. The urban Gigantism
- C13 New trends in city development in the last decades of the 20th Century. Returning to the traditional
- C14 The Friendly Urban Planning. Conclusions

Seminar contents

-



Evaluation

Written exam, containing 7 questions of different complexity. The homework is optional and it can replace 3 of the exam questions.

Selected bibliography

- F. CHOAY, *L'urbanisme, Utopies et réalités*, Ed. du Seuil, Paris 1965
P. PANERAI, J. CHASTEX, J.-C. DEPAULE, *Forme urbaine - de l'ilot à la barre*, Ed. Dunod, Paris 1977
K. SPIRO, *The City Shaped, Urban Patterns and Meanings Through History*, Thames and Hudson Ltd, London 1991
P. HALL, *Orașele de mâine*, Ed. All Educational, București 1999
T. DECKE, *The modern city revisited*, Spon Press, N.Y 2000
J. L. HAROUËL, *Istoria urbanismului*, Ed. Meridiane București 2000
G.M. CANTACUZINO, *Despre o estetică a reconstrucției*, Ed. Paideea, București 2001

18.00

COMPUTER AIDED DESIGN

Code **19.00**

Semester **1**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar **2 / week**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Offering the students the capacity to express their project ideas, completing the hand drawings and making the graphic representation part easier.

Responsible
T.Assist. PhD Arch. Rareș Drăgan

E-mail
raresv.dragan@gmail.com

Teaching Team
Arch. Roxana Popescu
Arch. A. Lazăr

Lecture / project contents

Phase 1:

Presenting the model and the working mode in Allplan.

2D representation in Allplan

3D representation in Allplan: building structure and reference plans, foundations, floors and stairs

3D representation in Allplan: walls, pillars, windows, doors and carpentry

3D representation in Allplan: plans, roof plans, roofing

Architectural representation in Allplan: plans, sections, facades, renderings

Phase 2:

Presenting the model and the working mode in ArchiCad.

2D representation in ArchiCad.

3D representation in ArchiCad: building structure and reference plans, foundations, floors and stairs

3D representation in ArchiCad: walls, pillars, windows, doors and carpentry

3D representation in ArchiCad: plans, roof plans, roofing

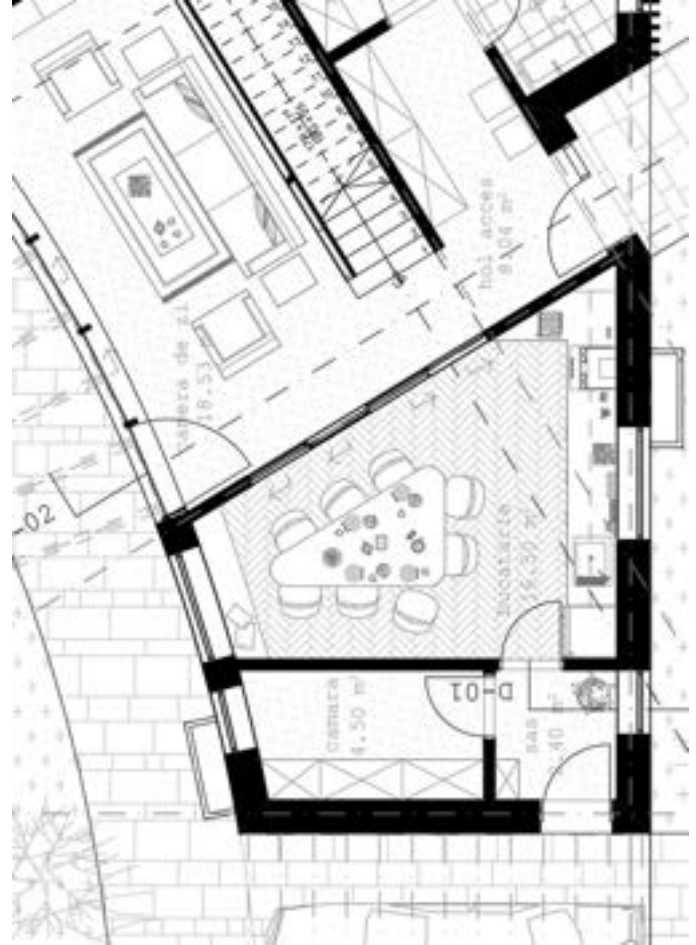
Architectural representation in ArchiCad: plans, sections, facades, renderings

Seminar contents

-

Evaluation

The final grade is the average between Phase 1 and Phase 2



Selected bibliography

Graphisoft ArchiCAD 22 Reference Guide; Graphisoft (în limba română pe www.consoft.ro)
GDL Cookbook 4.0; David Nicholson-Cole; Marmelade Graphics, Nottingham; 2007
Allplan 2018 Tutorial de arhitectură © Nemetschek Allplan GmbH, Munich, 2018
Computer Graphics; D. Dayton Reuter, ASLA; Allworth Press; New York; 2002
GDL Cookbook 4.0; D. NICHOLSON-COLE; Marmelade Graphics, Nottingham; 2007

19.00

ELEMENTS OF CONSTRUCTION

Code	20.00
Semester	1
Credits	4
No. of hours/ lecture	2 / week
No. of hours/ seminar	1 / week
No. of hours project	-
Discipline type	Compulsory
Examination form	Colloquim

Objectives

Knowing the construction elements and their way of representation through architectural drawing.

Responsible:
T. Assist. PhD Arch. Teodora Stanciu

E-mail:
Teodora.Stanciu@arch.utcluj.ro

Lecture / project contents

- C1 Introduction
- C2 Constructions with bearing structure
- C3 Construction of masonry
- C4 The overall concept of the masonry constructions
- C5 The construction in relation with the ground
- C6 Insulating the construction against soil moisture
- C7 Horizontal structural elements for masonry and reinforced concrete construction
- C8 Reinforced concrete construction
- C9 Traditional and modern wooden constructions
- C10 Roofs
- C11 Metal structures
- C12 The structure of the masonry, reinforced concrete, wooden and metal walls
- C13 Prefabricated wooden and reinforced concrete constructions

Seminar contents

- S1 B+GF+FF building, masonry construction, technical representation in plan
- S2 Section and elevation for the same building
- S3 Characteristic element intersections, documentation
- S4 Roof framing: plan and section
- S5 Construction detail

Evaluation

Theoretical written exam(50%) and practical assisted work during seminar hours(50%).



Selected bibliography

- D. HARDT, *Proiectarea detaliilor pentru constructii*, Ed. Tehnica, Bucuresti, 1974.
- E. NEUFERT, *Manualul arhitectului, Elemente de proiectare si de constructie*, Ed. Alutus, Miercurea Ciuc, 2004
- R. VITTON, *Manuel de la construction*, Ed. Presses polytechniques et universitaires romandes, Lausanne, 1999
- F. D. K. Ching, *Building Construction Illustrated*, Ed. John Wiley&Sons, 2001
- M. C. TORRICELLI, R. DEL NORD, P. FELLI, *Materiali e tecnologie dell'architettura*, Ed. Laterza, 2004
- R. CRISAN, *Constructii din lemn*, an 2, Ed.3, 2006
- R. CRISAN, *Constructii din zidarie si beton armat*, Ed. Universitara „Ion Mincu”, Bucuresti 2012
- R. CRISAN, *Constructii din otel*, Ed. Universitara „Ion Mincu” Bucuresti 2001

20.00

THE GEOMETRY OF ARCHITECTURAL FORMS

Code **21.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

The course examines the main categories of the geometric elements and it represents a guide that allows the student to learn the diversity of the architectural forms.

Responsible:

Assoc. Prof. PhD Arch.

Dana Sorina Opincariu

e-mail: dana.opincariu@arch.utcluj.ro

Lecture / project contents

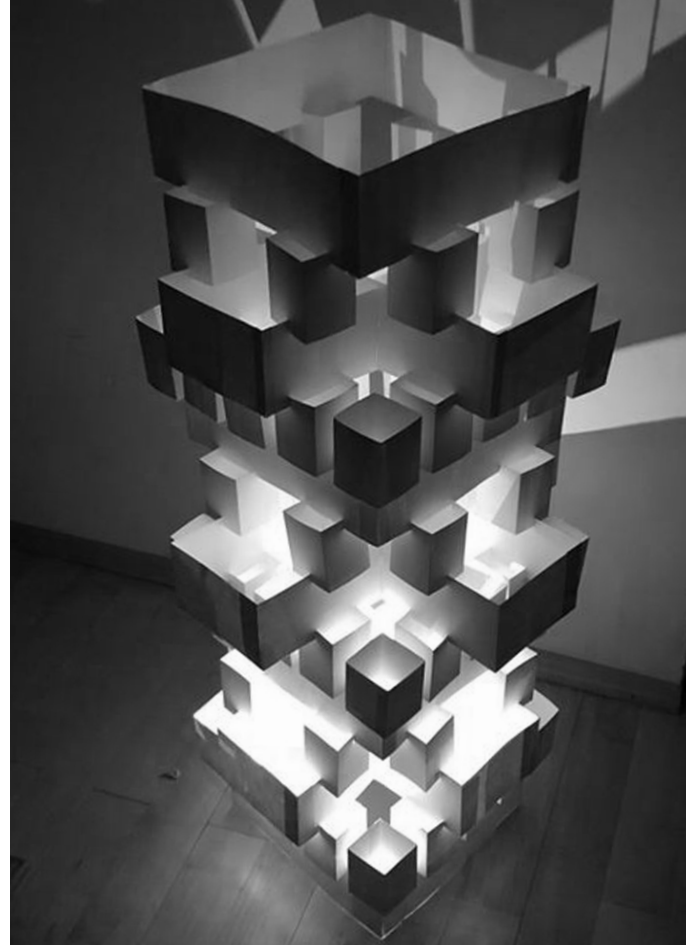
- C1 Introductory course- The geometry of architectural Forms
- C2 The geometry of forms in the history of architecture
- C3 Structure in relation with form, the process of creation
- C4 Architectural shapes: polyhedrated, folded and made out of thin curved plates
- C5 Architectural forms generated by cross-linked structural systems
- C6 Architectural forms generated by suspended and pneumatic structures
- C7 The geometry of forms in vernacular architecture
- C8 The geometry and the perception of architectural space
- C9 Geometry and composition in architecture
- C10 The geometry of the facade elements of the buildings
- C11 The geometry of ornamental elements in architecture
- C12 Symbolic geometry in architecture
- C13 New trends in architectural forms: advanced architecture
- C14 Course of synthesis / colloquium

Seminar contents

-

Evaluation

Elaboration of an about 5 pages paperwork on a subject chosen from the courses content, and building a model in relation with the chosen theoretical subject



Selected bibliography

B. JANE, M. BURRY, *The New Mathematics of Architecture*, Thames & Hudson, 2010
F. CHING, B. S. ONOUE, D. ZUBERBUHLER, *Building Structures Illustrated*, John Wiley & Sons, 2009 New Jersey
F. CHING, *Architecture, Form Space and Order*, John Wiley & Sons, New Jersey 1996
C. DUMITRESCU, *Geometria Formelor Arhitecturale*, editura Politehnica, 2009
H. ENGEL, *Tragsysteme / Structure Systems*, Second Edition, Hatje Cantz, 2009
J. BURRY, M. BURRY, *The new Mathematics Of architecture*, Thames & Hudson, 2010
F. MOUSSAVI, M. KUBO, *The Function of ornament*, Actar, Graduate School of Design, Harvard University, 2006

21.00

MECHANICS

Objectives

Code	22.00
Semester	1
Credits	4
No. of hours/ lecture	2 / week
No. of hours/ seminar	2 / week
No. of hours project	-
Discipline type	Compulsory
Examination form	Colloquium

Learning the main notions and principles from the mechanics of structures in order to successfully approach the technical disciplines in the following semesters.

Developing an intuitive understanding of the state of efforts, tensions and deformations of a structural element under external loads.

Applying the basic principles of structural mechanics at an elementary level in order to dimension and verify different structural elements.

Responsible:
Lect. PhD Eng. Radu Hulea

e-mail: radu.hulea@gmail.com

Lecture / project contents

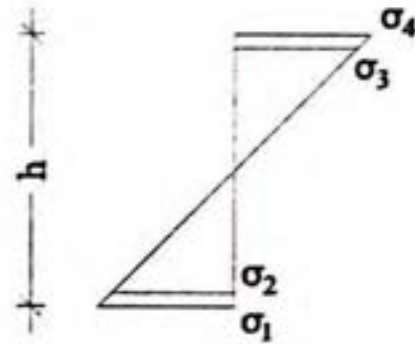
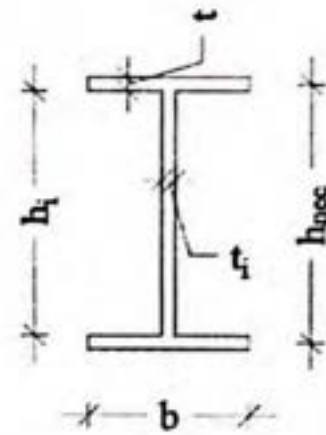
- C1 Structural elements and their evolution.
- C2 Introduction. The architecture in relation with the structure.
- C3 Actions in construction. Forces, operations with forces, the moment of a force.
- C4 The stability of the objects, supports and reactions.
- C5 Efforts and effort charts 1.
- C6 Efforts and effort charts 2.
- C7 Lattice beams.
- C8 The geometric properties of the sections.
- C9 Hooke's law.
- C10 The axial stress.
- C11 The bending stress and the cutting force.
- C12 Compound stress. The stability of the straight bar.
- C13 Structural walls and frames.
- C14 The structural concept.

Seminar contents

- S1 High structures made out of paper
- S2 Fundamental concepts
- S3 Actions, loads, forces and moments
- S4 Equations of stability. Calculation of reactions
- S5 Effort charts 1
- S6 Effort charts 2
- S7 Lattice beams
- S8 Determining the properties of elements
- S9 Dimensioning the axial stressed elements
- S10 Dimensioning the bending stressed elements
- S11 Dimensioning the stressed elements
- S12 Verifying the elements
- S13 Building a paper structure
- S14 The general way of analyzing an element

Evaluation

Written exam



Selected bibliography

- A. CIMPEANU, *Bazele mecanicii structurilor*, Editura U.T. PRES. Cluj-Napoca 2002
- P. GARRISON, *Basic Structures for Engineers and Architects*, Blackwell Publishing, 2005
- R. DABBY, *Structure for Architects*, John Wiley & Sons, 2012

BASIC DESIGN REGULATIONS 1

Code **23.00**

Semester **1**

Credits **2**

No. of hours/ lecture **1 / week**

No. of hours/ seminar **1 / week**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Colloquim**

Objectives

The course intends to present, study and acquire the ability to work with technical documents specific to the field of architectural design, the ability to accurately draft the components of architectural blueprints and the ability to properly determine and design spaces, in accordance with the technical requirements agreed upon by the Romanian legislation in force.

Responsible:

Lect. PhD Arch. Dana Julean

e-mail: dana.julean@arch.utcluj.ro

Lecture / project contents

- C1 Areas and building heights
- C2 Z coordinates, floor area ratio and building-to-land ratio
- C3 Symbols and principles of architectural drawings
- C4 Roof geometry
- C5 Stairs and ramps 01
- C6 Stairs and ramps 02
- C7 Evaluation

Seminar contents

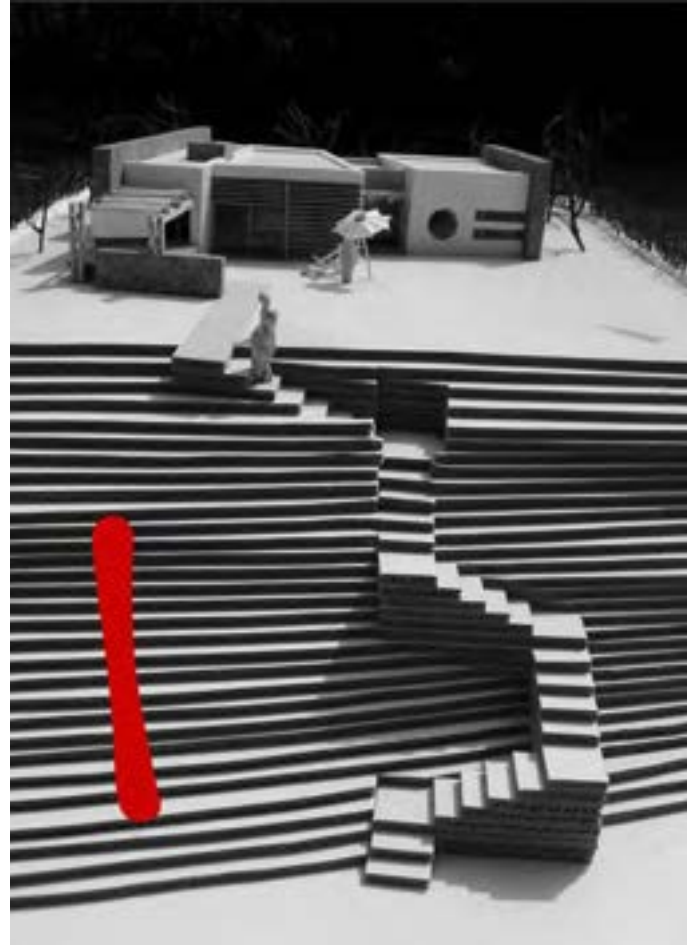
Applied exercises based on topics presented throughout the course

Evaluation

written test - 50 minutes

Selected bibliography

A selection of Romanian laws, regulations, guides in force.



23.00

ARCHITECTURAL DESIGN STUDIO 3

Code **24**

Semester **1**

Credits **12**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **10 / week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Transforming a set of conditions into spatial solution through architectural design.

Responsible

Assoc. Prof. PhD Arch. Șerban Țigănaș

e-mail: dragos.tiganas@arch.utcluj.ro

Teaching team

Assoc. Prof. PhD Arch. Cristina Purcar

Lect. PhD Arch. Paul Moldovan

T. Assist. PhD Arch. Flavius Muntean

Arch. PhD Alexandru Sabău

Arch. PhDs Tiberiu Bucsa

Arch. PhDs Fabian Luca

Arch. PhDs Catalin Pop

Arch. Cristian Urcan

Lecture / project contents

Project subject: Country house / city house - comparative project during the semester

It aims to explore locations and capturing information. Desk top ocumentation, to create an architectural concept fo the two contexts (rural and urban): presentation and evaluation, to develop the architectural concepts

Seminar contents

-

Evaluation

The evaluation and the notation of the projects are made by the responsible professors

Selected bibliography

OZALID, *Locuințe*, ed. Emilia Țugui, București
Grupul de lucru Rural, *Ghid de integrare în specificul rural*, OAR,
G. MINKE, *Construind cu pământ*, Simetria, București
M. GAUSA, *Housing*, ACTAR, Barcelona



24.00

02_{year}
2nd semester

RESIDENTIAL PLANNING

Code **25.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

Developing theoretical, methodological and practical abilities in urban residential and urban planning areas.

Responsible:

Assoc. Prof. PhD Arch.

Octav Silviu Olănescu

e-mail: octav.olanescu@arch.utcluj.ro

Lecture / project contents

- C1 Introduction
- C2 The urban residencial in recent history
- C3 The urban residential in the rationalist urban planning
- C4 The recalibration of attitudes towards urban residential (user/ inhabitant/pedestrian)
- C5 The constituent units of the environment built within the urban residential area (typologies)
- C6 The problems of urban design within the urban residential area
- C7 The problems of sustainability design within the urban residential area
- C8 The problems of communication design within the urban residential area
- C9 Principles for a 21st Century urban residential
- C10 Urban Residential in Romania for the last 25 years
- C11 Conclusions. Recap

Seminar contents

-



Evaluation

Written exam and 10-15 minute tests with questions from the previous course at the beginning of every course.



Selected bibliography

C. ALEXANDER, et. al., (1977), *A Pattern Language*, Ed. Oxford University Press, New York

M. CARMONA, S. TIESDELL, (editori), (2007), *Urban Design Reader*, Ed. Architectural Press /3 3

M. CARMONA, T. HEATH, T. OC, S. TIESDELL, (2003), *Public Spaces – Urban Spaces, The Dimensions of Urban Design*, Ed. Architectural Press, Oxford

P. GEDDES, (1915), *Cities in Evolution*, Ed. Williams & Norgate, Londra

P. HALL, (2002), *Cities Of Tomorrow – Third Edition*, Ed. Blackwell Publishing, Oxford

S. LEWIS, (2005), *Front to Back – a design agenda for urban housing*, Architectural Press - Elsevier

E. PĂNESCU, (coordonator proiect), (2011), *Cluj-Napoca în Proiecte, 50 de Ani 1960-2010*, Ed. Imprimeria Ardealul, Cluj-Napoca

P. STOLLARD, (editor), (1991), *Crime Prevention Through Housing Design*, Ed. Chapman & Hall, Londra

G. TOWERS, (2005), *An Introduction to Urban Housing Design – At Home in the City*, Architectural Press

25.00

THEORY OF ARCHITECTURE – DWELLING

Code **26.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course aims to gather knowledge about the concepts defining the architecture of habitation throughout history, to create understanding the relationship between the architecture of habitation and human lifestyles and to give the ability to address the problematics of contemporary housing.

Responsible
Prof. PhD Arch. Habil. Dana Vais

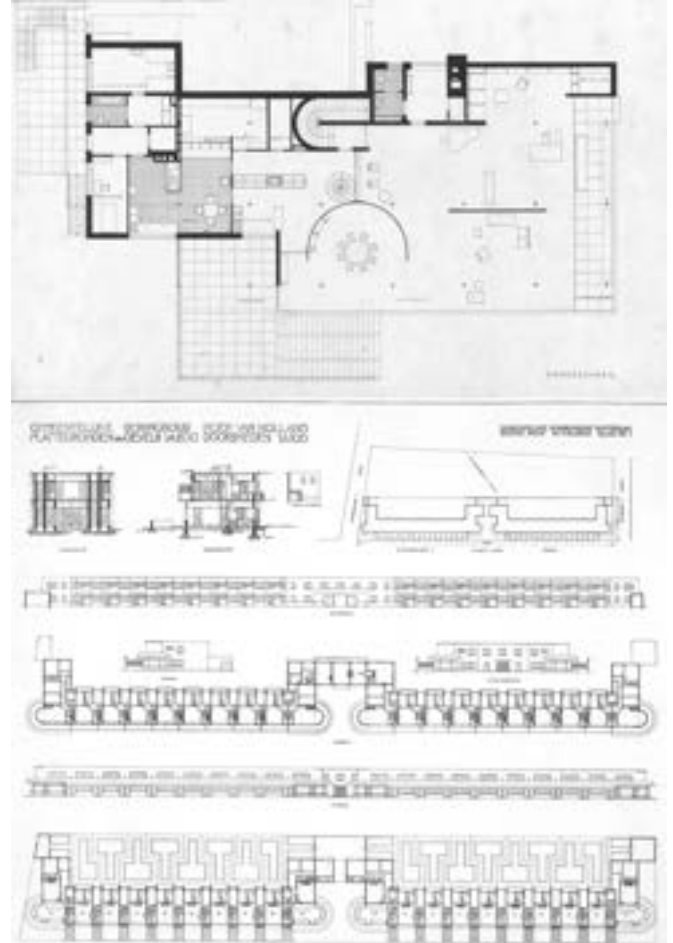
e-mail: dana.vais@arch.utcluj.ro

Lecture / project contents

- C1 Introduction - The Act of Dwelling as an All-Scales Phenomenon
- C2 Explaining the Forms of Habitat
- C3 Pre-Modern Habitation Models - Primitive, Traditional Rural,
- C4 Vernacular
- C5 Oriental and Mediterranean Models of Habitation
- C6 Western Models of Habitation, from the Middle Ages to the Modern Era
- C7 Early Social Housing
- C8 Modern and Contemporary Habitation
- C9 Modern Social Housing
- C10 Housing Typologies and the Functions of the Home
- C11 Psychology, Anthropology and Sociology of Habitation
- C12- Contemporary Social Housing and Housing Policies
- C14 Problematics of Contemporary Housing Architecture

Seminar contents

-



Evaluation

Written exam - essay

Selected bibliography

D VAIS, *Locuire*, Universitatea Tehnică din Cluj-Napoca, 1997

26.00

ASPECTS OF HUMAN SETTLEMENT PLANNING

Code **27.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The main purpose is to provide specific knowledge to understanding the operational urban intervention.

Responsible:

T. Assist. PhD Arch. Alice Oprică

e-mail: alice.oprica@arch.utcluj.ro

Lecture / project contents

- C1 Introduction
- C2 Local community planning tools in Romania
- C3 The analysis and synthesis of the existing situation. Measuring
- C4 plan, action plan, local scheme
- C5 Organizing plots and lots
- C6 Organizing the traffic area
- C7 Organizing public urban spaces. The markets
- C8 Organizing the green area of the city
- C9 Organizing the built area of the city
- C10 Detailed urban design
- Urban planning representations

Seminar contents

-

Evaluation

Written exam



Selected bibliography

I.D. YEANG, *Urban Design Compendium* Vol 1, Vol 2.

D. PRINZ, *Stadtebauliches Entwerfen* Vol. 1

D. PRINZ, *Stadtebauliches Gestalten* Vol. 2

National Association of City Transportation Officials, *Urban Street Design Guide*

Catalog BNA editia 2018, Secțiunea Spațiul public incluziv Catalog BNA edițiile 2016, 2014, 2012, Secțiunea Arhitectura spațiului public și urbanismul Catalog European 14, European 13, European 12, European 11, European 10, European 9, European 8, European 7

LEGEA nr. 350 / 2001 privind amenajarea teritoriului și urbanismul PUG Cluj si RLU, in vigoare pentru diferite localități din Județul Cluj Ghid privind Metodologia de Elaborare și Conținutul-Cadru al Planului Urbanistic de Detaliu

Ghid privind Metodologia de Elaborare și Conținutul-Cadru al Planului Urbanistic Zonal

Ghid privind Metodologia de Elaborare și Conținutul-Cadru al Planului Urbanistic General

27.00

DETAILS IN ARCHITECTURE 1

Code **28.00**

Semester **2**

Credits **3**

No. of hours/ lecture **2 / week**

No. of hours/ seminar **2 / week**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

-

Responsible:
Lect. PhD Arch. Silviu Aldea

e-mail: silviu.aldea@arch.utcluj.ro

Lecture / project contents

- C1 Introduction
- C2 Foundations and elevations
- C3 Vertical structural elements
- C4 Horizontal structural elements
- C5 Frameworks
- C6 Wall finish works
- C7 Interior compartments
- C8 Joineries
- C9 Floors
- C10 Stairs
- C11 Complex details 1
- C12 Complex details 2
- C13 New technologies compared to traditional technologies

Seminar contents

-

Evaluation

Written exam, or minimum two 8 grades (for each compulsory work during the semester).

Selected bibliography

D. HARDT, *Proiectarea detaliilor de finisaj*, Vol I, Ed.Tehnică, București, 1973
D. HARDT, *Proiectarea detaliilor de finisaj*, Vol II, Ed.Tehnică, București, 1974
A. STAN, *Finisaj - Volumul 1,2*, Institutul de Arhitectură "Ion Mincu", București, 1979
E. NEUFERT, *Les elements des projets de construction*, Paris, Dunod, 1992
Note de curs



28.00

ART HISTORY

Code **29.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

Art history's basic notions, techniques, periods, genres and personalities are discussed, aiming at broadening students' horizon towards the other forms of artistic expression, forming an educated gaze, developing critical skills and a multi-layered understanding of the space-image relationship.

Responsible

Assoc. Prof. PhD Arch. Cristina Purcar

e-mail: cristina.purcar@arch.utcluj.ro

Lecture / project contents

- C1 Materials and techniques: mural painting
- C2 Materials and techniques: tempera/ wood, oil/canvas, gouache
- C3 Materials and techniques: engraving, mozaic, stained glass
- C4 Materials and techniques: photography
- C5 Materials and techniques: sculpture, installation, assemblage
- C6 Composition: images in space
- C7 Composition: the space of the image
- C8 Composition: space as image - perspective
- C9 Genres: history
- C10 Genres: portrait
- C11 Genres: genre
- C12 Genres: landscape
- C13 Genres: still life
- C14 A thematic chronology

Seminar contents

-

Evaluation

Formative assessment during the semester through diverse methods with optional participation: short test, case study presentation, dialogue; max 3p/10. Final exam – written test of 8-10 questions; min.5p/10.

Selected bibliography

Annotated slides provided for every lecture.

BELL, Julian, *Mirror of the World. A New History of Art*. Thames&Hudson, 2010.

FARTHING, St. ed., *Art: The Whole Story*. Thames&Hudson, 2018.

FLEMING, William, *Arts and Ideas*. Wadsworth Publishing, 1994.

FOSTER H., KRAUSS R., BOIS Y.-A., BUCHLOH B.H.D., *Art since 1900. Modernism. Antimodernism. Postmodernism*, Londra: Thames&Hudson, 2007.

GOMBRICH E.H., *The Story of Art*. Phaidon Press, 1995.

PANOFSKY, Erwin, *Perspective as Symbolic Form*. New York: Zone Books, 1991.



29.00

BASIC DESIGN REGULATIONS 2

Code **30.00**

Semester **2**

Credits **2**

No. of hours/ lecture **1 / week**

No. of hours/ seminar **2 / week**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

The course intends to present, study and acquire the ability to work with technical documents specific to the field of architectural design, the ability to accurately draft the components of architectural blueprints and the ability to properly determine and design spaces, in accordance with the technical requirements agreed upon by the Romanian legislation in force.

Responsible:

Lect. PhD Arch. Dana Julean

e-mail: dana.julean@arch.utcluj.ro

Lecture / project contents

- C1 Bathrooms and public restrooms 01
- C2 Bathrooms and public restrooms 02
- C3 Residential spaces - general legislation
- C4 Residential spaces - the kitchen
- C5 Residential spaces - daytime spaces
- C6 Residential spaces - nighttime spaces
- C7 Residential spaces - the attic apartment
- C8 Civil defense shelters
- C9 Multistory car parks
- C10 Fire safety policies 01
- C11 Fire safety policies 02
- C12 Interactive course - case study
- C13 Recapitulation and conclusions
- C14 Evaluation

Seminar contents

- applied exercises based on topics presented throughout the course

Evaluation

written test - 50 minutes

Selected bibliography

A selection of Romanian laws, regulations, guides in force.



30.00

ARCHITECTURAL DESIGN STUDIO 4

Code **31.00**

Semester **2**

Credits **14**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **12/ week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Transforming a set of conditions into spatial solution through architectural design

Responsible

Assoc. Prof. PhD Arch. Șerban Țigănaș

e-mail: dragos.tiganas@arch.utcluj.ro

Teaching team

Assoc. Prof. PhD Arch. Cristina Purcar

Lect. PhD Arch. Paul Moldovan

T. Assist. PhD Arch. Flavius Muntean

Arch. PhD Alexandru Sabău

Arch. PhDs Tiberiu Bucsa

Arch. PhDs Fabian Luca

Arch. PhDs Catalin Pop

Arch. Cristian Urcan

Lecture / project contents

Project subject: CASA - Students Architecture Contest, realized in partnership with student associations. Living in the community

- Exploring locations and capturing information. Desk top ocumentation

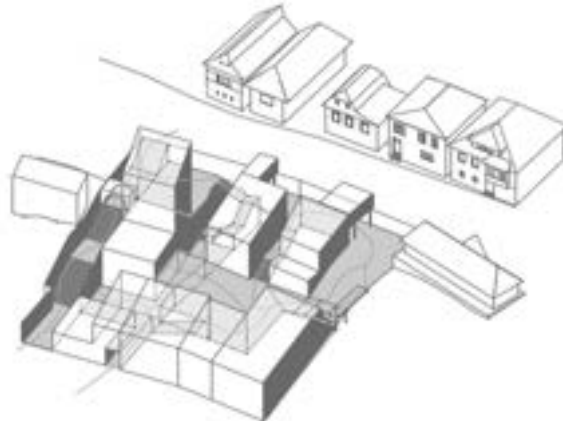
- Creating an architectural concept fo the two contexts (rural and urban): presentation and evaluation

- Developing the architectural concepts

- Final presentation

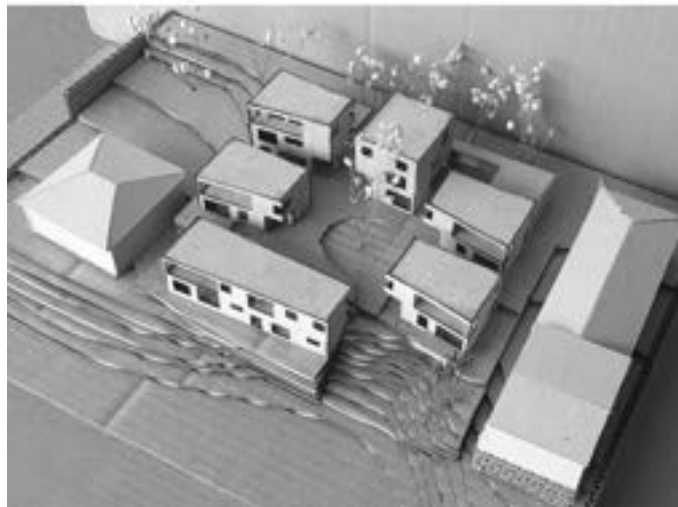
Seminar contents

-



Evaluation

The evaluation and the notation of the projects are made by the responsible professors.



Selected bibliography

OZALID, *Locuințe*, ed. Emilia Țugui, București
Grupul de lucru Rural, *Ghid de integrare în specificul rural*, OAR
G. MINKE, *Construind cu pământ*, Simetria, București
M. GAUSA, *Housing*, ACTAR, Barcelona

31.00

PRACTICAL ACTIVITY II

Code **32.00**

Semester **2**

Credits **3**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **30**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Extending knowledge about the architectural project, the interdisciplinary project and the connection between the project and the construction site.

Learning and practicing the specific vocabulary and arguments of the architecture project.

Responsible

Assoc. Prof. PhD Arch. Șerban Țigănaș

e-mail: dragos.tiganas@arch.utcluj.ro

Teaching team

Assoc. Prof. PhD Arch. Cristina Purcar

Lect. PhD Arch. Paul Moldovan

T. Assist. PhD Arch. Flavius Muntean

Arch. PhD Alexandru Sabău

Arch. PhDs Tiberiu Bucsa

Arch. PhDs Fabian Luca

Arch. PhDs Catalin Pop

Arch. Cristian Urcan

Lecture / project contents

Site visits, elaborating the practice work and practice colloquium.

The main activity consists in the presentation and explanation of architectural projects in the phase of construction. The projects are presented by the authors in their offices, with emphasis on interdisciplinarity and technology. Students get to acknowledge the phases of the projects and the phases of construction. The elements of construction previously studied are identified in reality in the studied buildings.

Updating the student portfolio with the projects elaborated during the previous two semesters.

Seminar contents

Evaluation

The evaluation and the notation of the projects are made by the responsible professors.

Selected bibliography



32.00

03_{year}
1st semester

GLOBAL AND LOCAL IN ARCHITECTURE

Code **33.10**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

Understanding the process of composing theoretical argumentative essays, contemporary architecture serving as subject.

Responsible:

Lect. PhD Arch. Adriana Măgerușan

e-mail:

adriana_magerusan@yahoo.com

Lecture / project contents

- C1 Introduction.
- C2 Representation through architecture.
- C3 Japan.
- C4 Netherlands.
- C5 Romania and the local aspect.
- C6 Romania and contemporary architecture.
- C7 Judged and unjudged globalising.
- C8 Rem Koolhaas.
- C9 Americanization.
- C10 Contextualism.
- C11 The Bilbao Effect.
- C12 Translocal networks.
- C13 Architecture as an action mechanism.
- C14 Recapitulation.

Seminar contents

-

Evaluation

Formative assessment during the semester through diverse methods with optional participation: dialogue; max 1p/10.

Written test of 2 questions; min.5p/10.

Selected bibliography

- D. VAIS, *Global si local în arhitectura contemporana*, Teorie-Note de curs, anul II, Ed. UT Press, Cluj, 2011 Suplimentar:
- Z. BAUMAN, *Globalization (1999)* - transl.: *Globalizarea si efectele ei sociale*, Ed. Antet, 1999; *Liquid Modernity* (2000) - transl: *Modernitatea lichida*, Ed. Antet, 2000
- K. FRAMPTON, *Towards a Critical Regionalism: Six Points for an Architecture of Resistance*, in: *The Anti-Aesthetic Essays on Post-Modern Culture*, Ed. Hal Foster, Bay Press, 1983, pp. 16-30
- M. LUPU, *Școli naționale în arhitectură [National Schools in Architecture]*, Ed. Tehnica, București, 1977
- C. NORBERG-SCHULZ, *Genius Loci*, Ed. Mardaga, 1981; *Existence, Space, Architecture*, London, 1971
- R. KOOLHAAS (with AMO-OMA, &&&), *Content*, Taschen, 2004; (with OMA and Bruce MAU), *S, M, L, XL*, The Monacelli Press, New York, 1995
- R. VENTURI, S. BROWN, I. STEVEN: *Lecția Las Vegas* (traducerea cărții *Learning from Las Vegas*, Ed. Universitară Ion Mincu, București 2017



33.10

SPACE PERCEPTION AND CONFIGURATION

Code **33.20**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course intends to seek and formulate a theory of space perception. Thus, it will focus on identifying the theoretical foundations of spatial perception and representation. A minute definition of the concepts will provide an analytical device that can then be used to understand the particular instances of architectural space. Therefor, the creator of space will be endowed with new theoretical tools in order to substantiate, argue and support future solutions.

Responsible:

Lect. PhD Arch. Dana Julean

e-mail: dana.julean@arch.utcluj.ro

Lecture / project contents

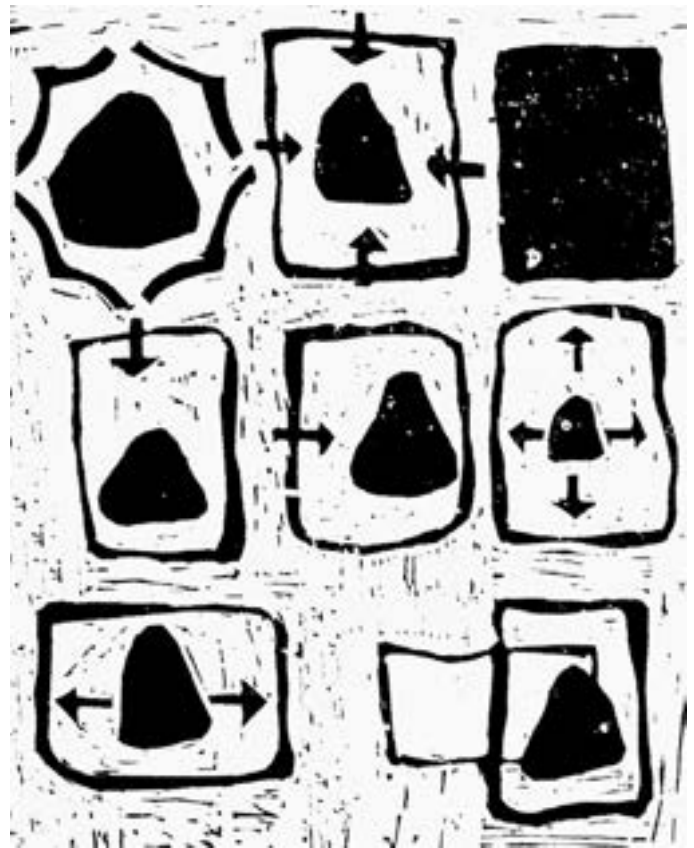
- C1 Introduction
- C2 The principles of perception
- C3 Personal space
- C4 The boundaries of space - the space of boundaries
- C5 Space and its meanings
- C6 From space to place and back
- C7 The inclusive place
- C8 The exclusive place
- C9 Architecture and fear
- C10 Spatial phobias
- C11 Failed architecture
- C12 "Cathedrals of Culture" - film screening
- C13 Recapitulation and conclusions
- C14 Evaluation

Seminar contents

-

Evaluation

written paper - 50 minutes



Selected bibliography

ARNHEIM, Rudolf. *Arta și percepție vizuală - o psihologie a văzului creator*. Trad. Florin Ionescu, București: Editura Meridiane, 1979.

ARNHEIM, Rudolf. *The Dynamics of Architectural Form*, Berkley & Los Angeles, Londra: University of California Press, 1977.

de BOTTON, Alain. *Arhitectura fericii*, București: Editura Vellant, 2009.

GAVRELIUC, Alin. *Psihologie interculturală: repere teoretice și diagnoze românești*, Iași: Polirom, 2011.

MICLEA, Mircea. *Psihologie cognitivă - Modele teoretico-experimentale*, Iași: Polirom, 2003.

PIAGET, Jean; INHELDER, Bärbel. *The Child's Conception of Space*. Trad. F.J. LANGDON; J.L. LUNZER, Londra: Routledge & Kegan Paul Ltd, 1971.

POP, Dana. *Despre percepția spațiului în arhitectură*, București: Paideia, 2015.

POP, Dana. *Arhitectură, percepție și frică*, București: Paideia, 2016.

33.20

ACADEMIC ETHICS

Code **33.30**
Semester **1**
Credits **2**
No. of hours/ lecture **2 / week**
No. of hours/ seminar -
No. of hours project -
Discipline type **Elective**
Examination form **Colloquium**

Objectives

To be determined

Responsible:
To be determined

Lecture / project contents

To be determined

Seminar contents

-

Evaluation

To be determined

Selected bibliography

To be determined



33.30

STRUCTURAL ENGINEERING THEORY 1

Code **34.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

Getting familiarized with the behaviour of structural elements and developing the ability to approach a problem intuitively. Acquiring knowledge about structural problems that may arise and obtaining the ability to solve them.

Responsible:
Assoc. Prof. PhD Eng. Petru Rus

e-mail: petru.rus@arch.utcluj.ro

Lecture / project contents

- C1 The notions of mechanics and the resistance of materials used during the course, with examples focused on the development of intuition.
- C2 Presentations, discussion.
- C3 Designing structures.
 - Limit states
 - The stages of the design process
 - Graphic representation of structures. Schematic drawing of structural elements and links between them.Analysing the behaviour of different types of structures using planar or spatial static schemes. Spatial behaviour of structures. Simplified schematization of some types of structures with the purpose of identifying determining factors in their behaviour.
- C4 Construction actions. How to evaluate actions and the transmission of them.
- C5 Numerical application for the evaluation of actions.

Seminar contents

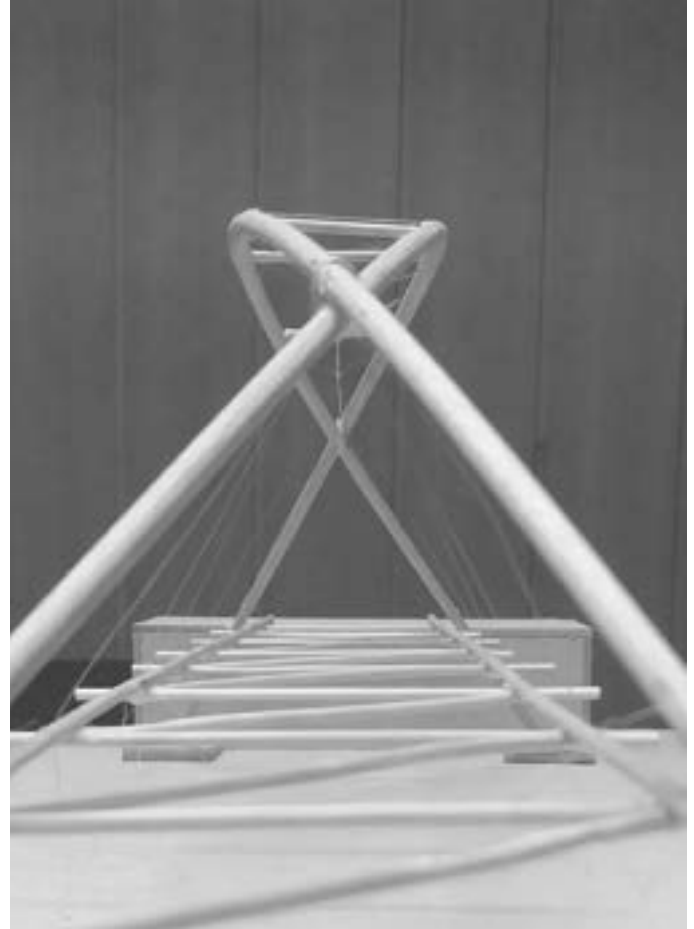
-

Evaluation

Final exam – written test which includes theoretical knowledge (60% of overall grade) and a practical part (40% of overall grade).
min. 5p/10.

Selected bibliography

V. BUDIŢ, *Structuri*, UTCN, 1997



34.00

HISTORY OF FURNITURE - STYLES

Code **35.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course is structured in two parts: the first one dealing with elements of language and composition principles; the second one describing the main historical periods and their correspondences with the furniture field, analyzing the particular technical and decorative methods. This ensures a correct understanding of the evolution of furniture, emphasizing the close connection with the architecture styles, and an appropriate evaluation of valuable pieces of furniture

Responsible:
Lect. PhD Arch. Andreea Pop

e-mail:
andreea.pop@arch.utcluj.ro

Lecture / project contents

- C1 General concepts related to the evolution of furniture and the establishment of the History of Furniture Design discipline
- C2 The ornament (I)
- C3 The ornament (II)
- C4 The ornament (III)
- C5 The evolution of furniture - Neolithic, Mesopotamian and
- C6 Egyptian Furniture
- C7 Furniture in ancient Greece and ancient Rome
- C8 Furniture in the Byzantine Empire and Islamic Space
- C9 Romanic furniture; Gothic furniture
- C10 Renaissance furniture
- C11 Baroque furniture; Régence furniture
- C12 Rococo furniture, oriental influences and techniques
- C13 Furniture in Classicism
- Furniture in the 19th century - Styles, materials, techniques and innovators
- C14 Furniture in the 20th century

Seminar contents

-



Evaluation

Exam - questions regarding the content of the 14 courses.



Selected bibliography

- P. PETRESCU, *Specific Ornamental Motifs (Motive ornamentale celebre)*, Ed. Meridiane, București, 1971
- Col.authors, *Art Dictionary.(Dicționar de artă)*,vol I,II, Ed. Meridiane, București,1995,1998
- C. FIELL, *Fiell P. Designing the 21st Century*,Ed. Taschen, Köln, 2002
- A. PĂNOIU, *Old Romanian Furniture (Mobilierul vechi românesc)*, Ed.Meridiane, București, 1975
- E.L. SMITH, *Histoire du mobilier*, Ed.Thames&Hudson, Paris, 1990
- G. KAESZ, *Ismerjük meg a bútorstílusokat*, Ed. Hatter, Budapesta, 1995
- D. VLAD, ed. coord., KATALIN M., ed., A. ARAMĂ, ed. Study Book no.2. *History of Furniture Design. Style Furniture Survey* (Caiet de studiu nr. 2, Istoria Mobilierului, relevee de mobilier stil), Ed. UTPRESS, Cluj-Napoca, 2006
- D. VLAD, ed. coord., A. MOȚU ed., Julean I., ed., Study Book no.3. *History of Furniture Design. Style Furniture Survey. Traditional Furniture Survey* (Stil-Istoria Mobilierului,Caiet de studii nr.3,Relevee de mobilier stil, relevee de mobilier traditional), Ed.UTPRESS, Cluj –Napoca, 2013

35.00

SPECIALISED DESIGN - URBAN PLANNING 1

Code **36.00**

Semester **1**

Credits **4**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **3 / week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Acquiring knowledge about urban design and the skills required further during the professional life.

Responsible

Lect. PhD Arch. Silivan Moldovan

e-mail

silivan.moldovan@arch.utcluj.ro

Teaching Team

Prof. PhD Arch. Iancu Adrian

Assoc. Prof. PhD Arch. Andreea Milea

Lect. PhD Arch. Dragoş Dascălu

T. Assist. PhD Arch. Alice Oprică

T. Assist. PhD Arch. Mihai Racu

Arch. Rodica Codoreanu

Arch. Alexandra Vancea

Lecture / project contents

Restructuring an urban residential area:

Phase 1 - Analysis of the existing situation

Phase 2 - Designing a guideline scheme and phasing out the intervention

Phase 3 - Completion of the urban planning project

Seminar contents

-



Evaluation

The evaluation and the notation of the projects are made by the responsible professors.

Selected bibliography

Ghid privind metodologia de elaborare și conținutul cadru al planului urbanistic zonal, MLPAT, București, 2000.

Legislație privind urbanismul, Matrix Rom, București, 2005.

Colecția de reviste de specialitate din biblioteca FAU si UTCN.

Bell, Simon, Elements of Visual Design in the Landscape, Spon Press, London and New York, 2004. English Partnerships and the Housing Corporation, Urban Design Compendium, Volumele 1 și 2, 2007.

Mangin D., Panerai Ph., Proiect urban, Ed. Parenthesès, Marseilles 1999.

Ministerul Lucrărilor Publice și Amenajării Teritoriului, Ghid privind reglementarea dezvoltării urbane prin operațiuni de parcelare și reparcelare a terenurilor introduse în intravilan, iunie 2002.

Mozas, Javier, Density: new collective housing, a+t Ediciones, 2006.

O'rourke, Juliana ed., Place Making. Celebrating Quality and Innovation in Urban Design, RUDI (Resource for Urban Design Information) și Academy of Urbanism, London, 2009.

36.00

DETAILS IN ARCHITECTURE 2

Code **37.00**

Semester **1**

Credits **42 / week**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Getting familiarized with different types of building materials and the way they are handled and put to use.

Responsible:

Lect. PhD Arch. Silviu Aldea

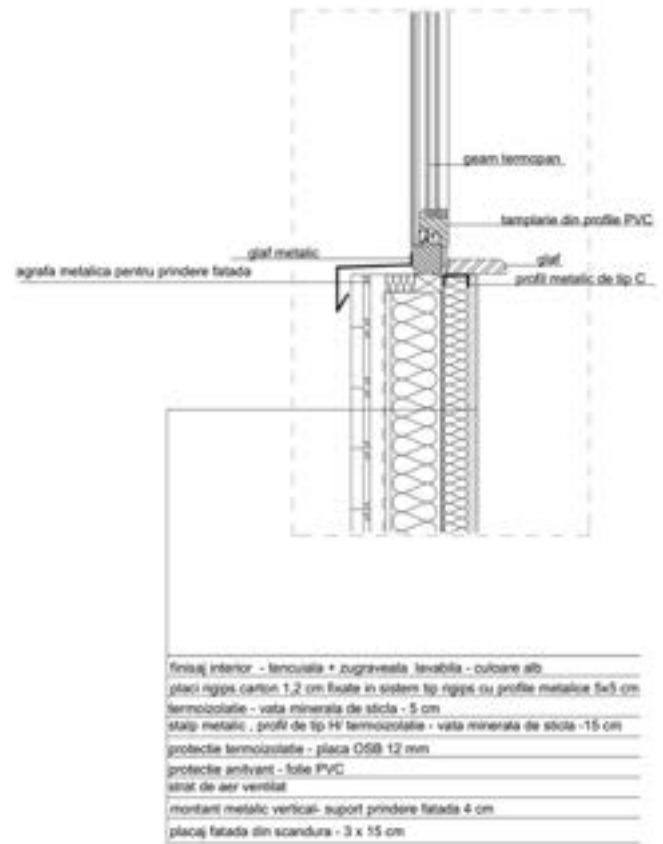
e-mail: silviu.aldea@arch.utcluj.ro

Lecture / project contents

- C1 The importance of architectural details.
- C2 Hydro-insulation buildings with basement. The building in relation to the natural ground.
- C3 The middle part of a building. Intermediate slab. Floating slab.
- C4 Load bearing and non-load bearing partitions. Finishes.
- C5 Technical and false ceilings.
- C6 Reinforced concrete or metal stairways. Connection with slabs.
- C7 Elevations. Thermal insulation. Discontinuities. Woodwork.
- C8 Façade 1: ventilated wood façade, ventilated load bearing masonry façade.
- C9 Façade 2: metal façade, concrete façade.
- C10 Glass façade
- C11 Pitched roofs: constructive elements
- C12 Flat roof 1: no passage flat roof and walk-on terrace on a reinforced concrete slab
- C13 Flat roof 2: metal systems, green roofs.
- C14 Free talk about the themes studied during lecture. Optional presentations from students.

Seminar contents

Assisted work during seminar hours



Evaluation

Final exam – written test (architecture detail) min.

5p/10 on each given subject.

Requires attendance to lectures and seminars.

Selected bibliography

- D. HARDT, *Proiectarea detaliilor în construcții*, Ed. Tehnica Bucuresti
- D. HARDT, *Proiectarea detaliilor de finisaje*, Ed. Tehnica Bucuresti 3 - GHIDUL ARHITECTULUI vol XIV – PIATRA
- A. MOISESCU, E. SAFTOIU, *Betonul în arhitectură*, Ed. Tehnica Bucuresti 1964
- Instructiuni tehnice pentru proiectarea constructiilor din beton aparent cu parament natural*-Indicativ C. 122/89 Buletinul Constructiilor nr. 2/1991
- Sinteza documentara nr. 20/1967 – *B.I.T. Executarea constructiilor din betoane aparente*
- Al. STAN – *FINISAJ vol. I si vol. II Inst. De Arhitectura* “ION MINCU” Bucuresti
- Instructiuni tehnice pentru executarea placajelor* Indicativ C 6-68
- Catalogul de detalii tip pentru constructii de locuinte si social culturale vol. I,II,III* (Biblioteca UTCN – cod 359.037)

37.00

HISTORY OF 19TH-CENTURY ARCHITECTURE

Code **38.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course addresses the architectural history of the period c.1750 – c.1890, discussing its major architectural themes, styles and personalities. Each theme departs from and returns to the 'station' of a familiar, local or Transylvanian monument, which is thereby positioned within the relevant socio-programmatic, technologic and aesthetic systems of meaning that it signifies.

Responsible:

Assoc. PhD Arch. Cristina Purcar

e-mail: cristina.purcar@arch.utcluj.ro

Lecture / project contents

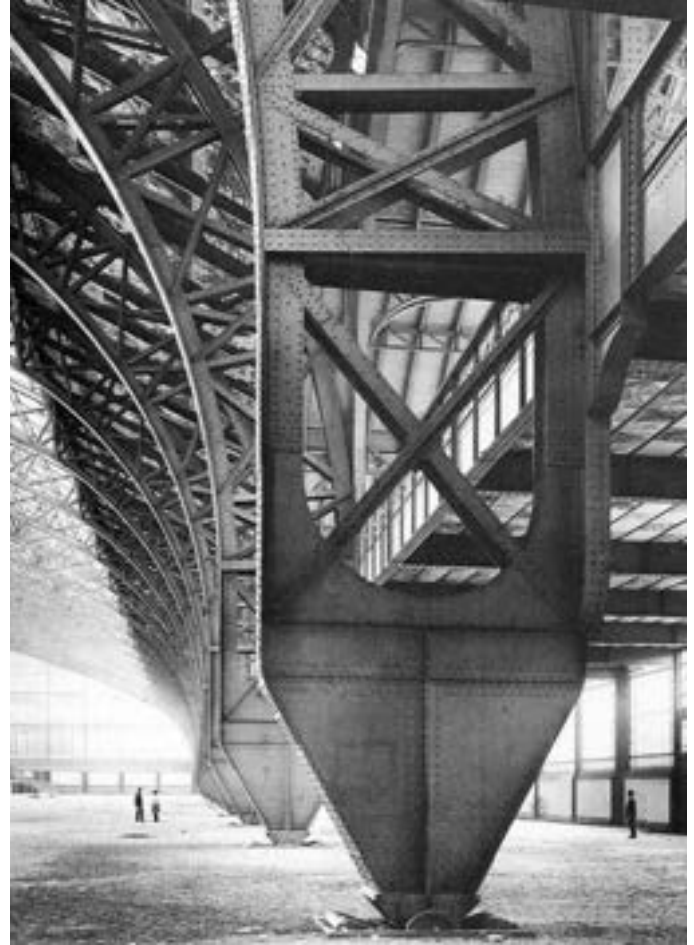
- C1 Royal Squares. Absolutism. Illuminism. Classicism
- C2 Neo-classical ensembles. Illuminism and reform
- C3 Aristocratic rural residences. Picturesque, archaeology, historic relativism
- C4 Architecture and revolution. Utopian projects. Legitimising monuments. The emergence of national heritage
- C5 Engineers' architecture. Structural uses of metal. Bridges and factories
- C6 Romanticism, nationalism, style. Neoclassicism and Neogothic. The United Kingdom, France
- C7 Romanticism, nationalism, style. Neoclassicism and Neogothic. Prussia, Bavaria, Greece
- C8 Progressist historicism. Schinkel, Ruskin, Hübsch
- C9 Progressist historicism. Bindesboll, Viollet-le-Duc, Labrouste, Paxton
- C10 Haussmannian Paris
- C11 Eclectic Classicism. The extension of the Louvre. The Garnier Opera. Semper
- C12 The architecture of commerce. Galleries and *grand magasins*
- C13 Ringstrasse Vienna. Architecture and representation
- C14 Railway stations and universal exhibitions

Seminar contents

-

Evaluation

Final exam – written test or thematic essay.



Selected bibliography

BERGDOLL, Barry. *European Architecture 1750-1890*. Oxford University Press, 2000.

FRANCASTEL, Pierre. *Art and Technology in the Nineteenth and Twentieth Centuries*, NY.

HITCHCOCK, Henry-Russell. *Architecture: Dix-neuvième et vingtième siècles*. Bruxelles: Pierre Mardaga, 1981.

SCHORSKE, Karl. *Fin-de-siècle Vienna. Politics and Culture*. Vintage, 1980.

WATKIN, David, MIDDLETON R. *Storia Universale dell' Architettura, Architectura moderna (sec XVIII-XIX)*. Electa, 1977.

MIGNOT, Claude. *Architecture of the 19th century*, 1994.

*** *Le livre des expositions universelles 1851-1989*. Paris: Editions des arts decoratifs Herscher, 1983.

38.00

ECOLOGICAL ARCHITECTURE

Code **39.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Getting familiarized with ecological solutions that can be applied to urbanism, architecture and interior design.

Responsible:

T.Assist PhD Arch. Mihai Racu

e-mail: mihai.racu@arch.utcluj.ro

Lecture / project contents

- C1 Introduction.
- C2 Basic notions for sustainable design.
- C3 Basic notions for sustainable design.
- C4 Examples of ecological houses.
- C5 Energy sources and their ecological and architectural impact.
- C6 The air in relation to architecture.
- C7 The water in relation to architecture.
- C8 Natural light.
- C9 Building materials.
- C10 Building materials.
- C11 Urbanism and ecology.
- C12 Generative simulations and design as methods of optimizing the architecture.
- C13 Recommendations for sustainable architectural design.
- C14 Recommendations for sustainable architectural design.

Seminar contents

-

Evaluation

Final exam – written test (theory) min. 5p/10

Selected bibliography

- E. NEUFERT, *Manualul arhitectului*, Ed. Alutus, 2004.
- Notes during the lecture hours.
- Course (pdf) - can be found in the 3rd year group.



39.00

ARCHITECTURAL DESIGN STUDIO 5

Code **40.00**

Semester **1**

Credits **12**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **10 / week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Acquiring the ability to develop an architectural project on a complex programme, in close connection to an urban site, based on in-depth contextual analyses.

Responsible

Assoc. Prof. PhD Arch. Paul Mutică

e-mail

paul.mutica@arch.utcluj.ro

Teaching team

Lect. PhD Arch. Smaranda Todoran

Lect. PhD Arch. Adriana Măgeruşan

Lect. PhD Arch. Andrei Nejur

T. Assist. PhD Arch. Andrei Kiss

PhD Arch. Alexandru Fleşeriu

Arch. PhDs Ştefania Boca

Arch. PhDs Romeo Cuc

Arch. Radu Roşca

Lecture / project contents

Exploring, analysing and documenting potential sites for an office - hub for creative industries. Defining the most oportune site and elaborating the architectural project, tackling integration, programmatic, spatial, structural and ambiantal aspects.

Seminar contents

-

Evaluation

The evaluation and the notation of the projects are made by the responsible professors.



Selected bibliography

- Archdaily, Detail, Arhitectura, Zeppelin, igloo etc.;
- E. Neufert, *Manualul arhitectului*- elemente de proiectare si de constructie, Alutus S.A., Miercurea Ciuc, 2004;
- G. VAIS, *Programe de arhitectura*, UT Press, 2008

40.00

03_{year}
2nd semester

TRADITIONAL FURNITURE

Code **41.10**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course includes several parts, comprising notions of ethnography, traditional ornamentation (materials, technique and ornaments), buildings layout of the traditional dwelling in Romania and furniture display. It presents the main furniture pieces which are to be found in some important ethnographic museums in Romania, developing an appreciative attitude of the students towards national identity and heritage.

Responsible:

Assoc. Prof. PhD Arch Dorina Vlad

e-mail: dorinavlad@yahoo.com

Lecture / project contents

- C1 Ethnography. History of Ethnography in Romania; ethnographic research
- C2 Ethnographic museums worldwide and in Romania. (I)
- C3 Ethnographic museums worldwide and in Romania. (II)
- C4 Traditional ornamentation
- C5 Genesis and evolution of settlements in Romania
- C6 Household and Traditional House in Romania
- C7 The interior of the traditional dwelling; heating systems
- C8 Main types of traditional furniture by function and constructive techniques. (I)
- C9 Main types of traditional furniture by function and constructive techniques. (II)
- C10 Main types of traditional furniture by function and constructive techniques (III)
- C11 Main types of traditional furniture by function and constructive techniques. (IV)
- C12 Main types of traditional furniture by function and constructive techniques. (V)
- C13 Furniture of urban influence
- C14 *Variable theme

Seminar contents

-



Evaluation

Colloquium - questions regarding the content of the 14 courses, individual papers.



Selected bibliography

- C. BONTE P., IZARD M. *Dictionary of Ethnology and Anthropology (Dicționar de Etnologie și Antropologie)*, Ed. Polirom, București, 1999
- V. BUTURA, *Ethnography of Romanian people (Etnografia poporului român)*, Ed. Dacia, Cluj – Napoca, 1978
- V. BUTURA, *Old testimonies of Romanian civilization - Transylvania - ethnographic study (Străvechi mărturii de civilizație românească – Transilvania- studiu etnografic)*, Ed. Științifică și Enciclopedică, București, 1989
- R. CAPESIUS, *Traditional Romanian Furniture (Mobilierul țăranesc românesc)*, Ed. Dacia, Cluj – Napoca, 1974
- J. CHEVALIER, Ghebrant A. *Dictionary of Symbols (Dicționar de simboluri)*, vol. I, II, III, Ed. Artemis, București, 1994
- N. DUNĂRE, *Traditional Ornaments – a comparative approach (Ornamentica tradițională comparată)*, Ed. Meridiane, București, 1979
- K. KOS, *Ethnography Studies (Studii de Etnografie)*, Ed. Kriterion, Cluj – Napoca, 2001
- A. PĂNOIU, *Old Romanian Furniture (Mobilierul vechi românesc)*, Ed. Meridiane, București, 1975

41.10

FURNITURE OF THE 20TH CENTURY

Code	41.20
Semester	2
Credits	2
No. of hours/ lecture	2
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Elective
Examination form	Colloquium

Objectives

The course's purpose is to broaden the perspective on the History of Furniture, for students who are interested in the domain, through the presentation of additional information regarding the specific artistic tendencies and their followers in the field, from the beginning of the 20th century, until the beginning of the 21st. This is accomplished in form of examples that highlight the connection between furniture design, and the creative work connected to the scientific, technical, artistic development of society.

Responsible
Assoc. Prof. PhD Arch. Dorina Vlad

e-mail: dorinavlad@yahoo.com

Lecture / project contents

- C1 Furniture fairs and exhibitions
- C2 Science, art and technology at the end of the nineteenth and early twentieth centuries
- C3 Science, art and technology in the twentieth century
- C4 1900 Art - arts, architecture, furniture (definition, history, directions)
- C5 Art Deco '- context, furniture (protagonists and works)
- C6 Modern Current
- C7 30s - 40s (premises, countries, authors)
- C8 The '50s
- C9 Pop Art
- C10 Scandinavian Furniture Design (premises, countries, authors, trends)
- C11 Design in Germany
- C12 Design in Italy
- C13 Trends in the design of the last decades of the 20th century and the beginning of the 21st century
- C14 *Variable theme

Seminar contents

-



Evaluation

Colloquium - questions regarding the content of the 14 courses, individual papers



Selected bibliography

- M. BYERS, *The Design Encyclopedia*, Ed. MOMA, 2004
- M. BYERS, *New Chairs*, Ed. Chronicle Books, San Francisco, 2006
- Col. authors. *Art at the Turn of the Millennium*, Ed. Taschen, Köln, 1999
- Col. authors. *Bauhaus*, Ed. Könemann, Köln, 2000 · Col. authors. *Art Dictionary*.(*Dicționar de artă*), vol.I,II,Ed. Meridiane, Bucuresti, 1995, 1998
- A. DUNCAN, *Art Deco*, Ed. Thames & Hudson, Londra, 1977
- FIELL Ch.,FIELL P. *Designing the 21st Century*, Ed. Taschen, Köln, 2002
- FIELL Ch.,FIELL P. *Scandinavian Design*, Ed. Taschen, Köln, 2002
- FIELL Ch.,FIELL P. *1000 Chairs*, Ed.Taschen, Köln, 1991
- SMITH E.L. *Histoire du mobilier* , Ed. Thames & Hudson,Paris, 1990
- RASHID K. *I Want to Change the World*, Ed. Universe, New York, 2001

41.20

FURNITURE DESIGN TECHNIQUE

Code **41.30**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course presents the basic notions regarding the function, dimension, and structure in furniture design, highlighting the aesthetic aspects, the connection between material, structure and aesthetic expression, the relations between furniture and the space in which it is located.

Responsible:

Lect. PhD Arch. Andreea Pop

e-mail: andreea.pop@arch.utcluj.ro

Lecture / project contents

- C1 Brief evolution of furniture design, materials, moments of professional separation. The furniture design project
- C2 Anthropometry and ergonomics.
- C3 Furniture design structure and construction
- C4 Furniture components construction.
- C5 Wood material. Concepts of responsible forest management
- C6 Wood essences - main features and examples.
- C7 Storage furniture I
- C8 Storage furniture II
- C9 Supporting furniture I
- C10 Supporting furniture II
- C11 Sleeping furniture
- C12 Furniture for various activities I
- C13 Furniture for various activities II
- C14 Furniture made of other materials

Seminar contents

-



Evaluation

Colloquium - questions regarding the content of the 14 courses, individual papers



Selected bibliography

- CH. FIELL ,P. FIELL, *Designing the 21st Century*, Taschen, Köln, 2002
- N. GIBBS, *The Wood Handbook*, Quarto, London, 2005
- F. IONESCU ,V. NĂSTASE, *Furniture Design and Interior Architecture* (Proiectarea mobilei și arhitectura interioarelor), București,1970
- K. MURADIN BAYER, *Furniture structure and construction* (course), UTPRESS,Cluj – Napoca,1992
- J. PANERO, M. ZELNIK, *Las dimensiones humanas en los espacios interior.*, Estándares antropométricos, 7th edition, G. Gili, Barcelona, 1996
- D. VLAD, (ed. coord.), A. Moțu, (ed.), I. Julean, (ed.). *Study Book no.3. History of Furniture Design. Style Furniture Survey. Traditional Furniture Survey (Stil-Istoria Mobilierului,Caiet de studii nr.3,Relevee de mobilier stil, relevee de mobilier traditional)*, Ed.UTPRESS, Cluj –Napoca, 2013

41.30

STRUCTURAL ENGINEERING THEORY 2

Code	42.00
Semester	2
Credits	3
No. of hours/ lecture	2 / week
No. of hours/ seminar	2 / week
No. of hours project	-
Discipline type	Compulsory
Examination form	Exam

Objectives

Acquiring the necessary knowledge for designing correct and economical structures.

Developing an optimal appreciation of the size of the elements.

Choosing the adequate materials for the structural elements.

Responsible
Assoc. Prof. PhD Eng. Nicolae Socaciu

e-mail: nicolae.socaciu@arch.utcluj.ro

Lecture / project contents

- C1 Loads evaluation
- C2 Calculation methods for constructions
- C3 Reinforced concrete elements: deformations, behaviour
- C4 Reinforced concrete elements: slabs
- C5 Reinforced concrete elements: beams
- C6 Reinforced concrete elements: columns
- C7 Precompressed elements
- C8 Metal elements: deformations, behaviour
- C9 Metal elements: solid core beams
- C10 Metal elements: columns
- C11 Metal elements: lattice girders
- C12 Lattice girders and arches
- C13 Reinforced concrete structural walls, foundations
- C14 Wood elements

Seminar contents

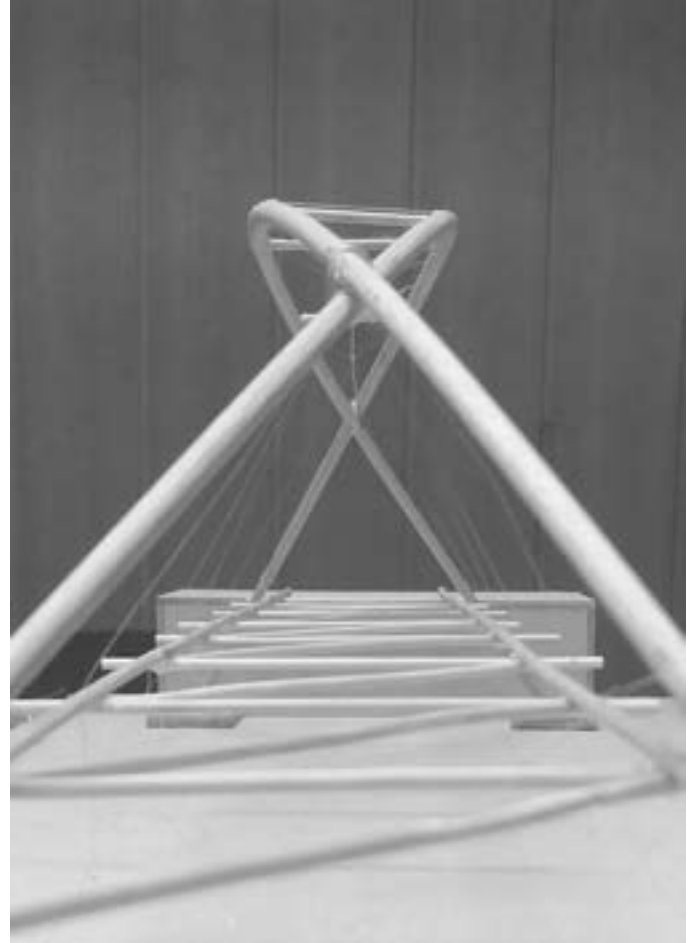
S1 Evaluation of actions in constructions
S2 Determining the efforts in the dimensioned elements
S3 Predimensioning of reinforced concrete slabs
S4 Predimensioning of flat plate slabs
S5 Predimensioning of main beams
S6 Predimensioning of secondary concrete beams
S7 Predimensioning of concrete columns
S8 Problem solving: reinforced concrete warehouse
S9 Predimensioning of metal purlins
S10 Predimensioning of main metal beams (simple and composed)
S11 Predimensioning of metal trusses
S12 Predimensioning of metal columns
S13 Problem solving: metal warehouse
S14 Predimensioning of wood elements

Evaluation

Written Test – Theoretical knowledge – 50 %
Written Test – Problem solving - 50 %

Selected bibliography

Moga, P, Gutiu, S, Moga, C. *Elemente structurale din oțel: bazele proiectării* (U.T. Press, Cluj-Napoca, 2015).
Hangan, M. *Construcții din beton armat* (Ed. Tehnică, 1963).
Dalban, C. *Construcții metalice* (Editura Didactica si Pedagogica, 1976).
Negoita, A. *Construcții civile* (Editura Didactica si Pedagogica, 1976).



42.00

BUILDING SERVICES

Code	43.00
Semester	2
Credits	2
No. of hours/ lecture	2 / week
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Compulsory
Examination form	Exam

Responsible
Lect. PhD. Eng. Tania Rus

e-mail
tania.rus@insta.utcluj.ro

Objectives

Acquiring the necessary knowledge for conceiving architectural projects with a high awareness of the contemporary needs, requirements and technologies available in terms of building servicing.

Understanding the impact of building service integration in architecture.

Becoming familiar with state-of-the-art building service systems and technologies and their spatial implications.

Lecture / project contents

C1 The quality of indoor environment: thermal comfort, health and hygiene comfort, air quality, lighting, acoustics

C2-3 Heating installations

C4-5 Ventilation, air-conditioning and refrigeration installations

C6-8 Sanitary installations

C9-11 Electrical installations

C12 Gas supply installations

C13 Equipment and installations for renewable energy sources

C14 The role of installations in the sustainable development of buildings and cities

Written Test – 100%.

Enciclopedia tehnică de instalații – Instalații de încălzire (Cap. 4-6), Ed. Artenco, București, 2010.
Enciclopedia tehnică de instalații – Instalații de ventilație și climatizare (Cap. 5-8), Ed. Artenco, București, 2010.
Enciclopedia tehnică de instalații – Instalații sanitare (Cap. 2-6), Ed. Artenco, București, 2010.
Enciclopedia tehnică de instalații – Instalații electrice și automatizare (Cap. 3-6), Ed. Artenco, București, 2010.

HISTORY OF MODERN AND CONTEMPORARY ARCHITECTURE

Code **44.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The aims of the course is understanding the emergence and evolution of architectural modernity, to gain the ability to make value judgments about the architectural products of recent history and to gather knowledge about the 20th Century architecture and urbanism.

Responsible
Prof. PhD Arch. Habil. Dana Vais

e-mail: dana.vais@arch.utcluj.ro

Lecture / project contents

- C1 The styles of 1900 / Horta, Guimard, Gaudi, Van de Velde / A.Perret / T.Garnier
 - C2 Ch. Rennie-Mackintosh/ Secession / Loos
 - C3 German Expressionism / Dutch Expressionism / De Stijl
 - C4 Behrens / Bauhaus / Gropius / Mies van der Rohe
 - C5 Futurism / Russian Constructivism
 - C6 Le Corbusier
 - C7 Frank Lloyd Wright / Art Deco
 - C8 Postwar Functionalism / Aalto / Brutalism
 - C9 Architecture-sculpture / Niemeyer
 - C10 Architecture-structure / Megastructures / Metabolism / High-tech
 - C11
 - C12 Postmodernism
 - C13 Deconstructivism / Minimalism
 - C14 Contemporary trends
- An overall perspective on the 20th Century architecture

Seminar contents

-

Evaluation

Written exam - essay



Selected bibliography

- K. FRAMPTON, *Modern Architecture. A Critical History*, Thames and Hudson, 1992 (third edition)
- W. J. R. CURTIS, *Modern Architecture since 1900*, Phaidon Press, 1996
- J. L. COHEN, *The Future of Architecture since 1889*, Phaidon, 2012
- M. TAFURI, *Francesco Dal Co, Architettura Contemporanea*, Electa, 1976

44.00

BUILDING TYPES

Code **45.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

Basic notions about functionality in architecture that aim at broadening students' horizon, forming an educated gaze used later during the professional life and further years of study.

Responsible:
Assoc. Prof. PhD Arch. Șerban Țigănaș

e-mail:
dragos.tiganas@arch.utcluj.ro

Lecture / project contents

- C1 Introductory notions: subject matter, defining the basic notions, defining the functional model;
- C2 Administrative buildings: offices, local government - townhalls, credit institutions, justice;
- C3 Public catering buildings: restaurants, snack bars, bars and confections;
- C4 Tourism buildings: hotels, motels, cottages, shelters and camps;
- C5 Entertainment building: theatres and cinemas;
- C6 Library buildings: libraries, mediatheques and archives;
- C7 Buildings for museums;

Seminar contents

-

Evaluation

Final exam – written test; includes theoretical knowledge (50% of overall grade) and a practical part (50% of overall grade). min. 5p/10.
Requires attendance to lectures.



Selected bibliography

- Architectural Design: Design Hotels*, Links, Barcelona 1999-2000*
- Architectural Design: New Working Spaces*, Links, Barcelona 1999-2000*
- L. ALLEGRET, *Musées*, Ed. du Moniteur, Paris 1989/1992 (vol. I și II)*
- R. ALOI, *Architetture per lo spettacolo*, Ulrico Hoepli Editore, Milano 1958
- M. Z. BOULET, & C. MOISSINAC, & F. SOULIGNAC, *Auditoriums*, Editions du Moniteur, Paris 1990*
- C. BRAGHIERI, *Aldo Rossi*, Zürich, München, London 1993*
- S. CANTACUZINO, RE/ARCHITECTURE, *Old Buildings/New Uses*, Thames and Hudson, 1989*
- A. COOLS, *Les lieux de travail, architectures spécialisées*, Presses Universitaires de Bruxelles 1984
- L. GÁDOROS, *Középületek tervezése*, Tankönyvkiadó, Budapest 1981
- A. IOTZU, *Teatrul, act de creație arhitecturală*, Ed. Tehnică, București 1981
- C. LĂZĂRESCU, *Construcții hoteliere*, Ed. Tehnică, București 1971

45.00

SPECIALISED DESIGN - FURNITURE

Code **46.00**

Semester **2**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **3 / week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Ability to analyse and design an object in space in agreement with the proposed themes.

Ability to translate the idea into material.

Responsible:

Assoc. Prof. PhD Arch. Dorina Vlad

e-mail: dorinavlad@yahoo.com

Lecture / project contents

Project with a variable theme depending on the requirements of topicality in the field of design.

Seminar contents

-



Evaluation

The evaluation and the notation of the projects are made by the responsible professors.



Selected bibliography

- I. CIZMARU, M. CIZMARU, *Proiectarea si fabricarea mobilei de arta*, Braşov,2005
- CH. FIELL, P. FIELL, *Designing The 21st Century*, Ed. Taschen, Köln, 2002
- N. GIBBS, *The Wood Handbook*, Ed.Quarto, Londra, 2005
- G. MANDU, L. EVI, *Tehnologia maselor plastice*, Ed.UAIM, Bucureşti, 2005
- K. M. BAYER, *Structura şi construcţia mobilei* (curs), Ed. UTPRES,Cluj – Napoca,1992
- J. PANERO, M. ZELNIK , *Las dimensiones humanas en los espacios interiors*. Estándares antropométricos, edición a VII-a, Ed. G. Gili, Barcelona, 1996
- Col. Autori - .Material Word 2 – *Innovative Materials for Architecture and Design*, Ed.Birckhauser, Basel,2006
- D. VLAD, ed. coord.,M. KATALIN, ed., A. ARAMĂ, ed. *Caiet de studiu nr. 1, Istoria Mobilierului, relevee de mobilier popular*, Ed. UTPRESS Cluj-Napoca, 2005

46.00

ARCHITECTURAL DESIGN STUDIO 6

Code **47.00**

Semester **2**

Credits **14**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **12 / week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Acquiring the ability to develop an architectural project on a complex programme, in close connection to an urban site, based on in-depth contextual analyses.

Responsible

Assoc. Prof. PhD Arch. Paul Mutică

e-mail

paul.mutica@arch.utcluj.ro

Teaching team

Lect. PhD Arch. Smaranda Todoran

Lect. PhD Arch. Adriana Măgeruşan

Lect. PhD Arch. Andrei Nejur

T. Assist. PhD Arch. Andrei Kiss

PhD Arch. Alexandru Fleşeriu

Arch. PhDs Ştefania Boca

Arch. PhDs Romeo Cuc

Arch. Radu Roşca

Lecture / project contents

Exploring, analysing and documenting potential sites for a mixed urban programme, combining collective housing, commerce and (semi-) public space. Defining the most oportune site and elaborating the architectural project, tackling integration, programmatic, spatial, structural and interior design aspects.

Seminar contents

-



Evaluation

The evaluation and the notation of the projects are made by the responsible professors.

Selected bibliography

- Archdaily, Detail, Arhitectura, Zeppelin, igloo etc.;
- E. Neufert, *Manualul arhitectului* - elemente de proiectare si de constructie, Alutus S.A., Miercurea Ciuc, 2004;
- G. VAIS, *Programe de arhitectura*, UT Press, 2008

47.00

PRACTICAL ACTIVITY III

Code **48.00**

Semester **2**

Credits **3**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **30**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Knowing the different building materials and techniques. Introducing the students into the construction site execution. Elaborating a paper work that synthesizes the observations and elaborating architectural details on the construction site.

Responsible

Assoc. Prof. PhD Arch. Paul Mutică

e-mail

paul.mutica@arch.utcluj.ro

Teaching team

Lect. PhD Arch. Smaranda Todoran

Lect. PhD Arch. Adriana Măgeruşan

Lect. PhD Arch. Andrei Nejur

T. Assist. PhD Arch. Andrei Kiss

PhD Arch. Alexandru Fleşeriu

Arch. PhDs Ştefania Boca

Arch. PhDs Romeo Cuc

Arch. Radu Roşca

Lecture / project contents

Site visits, elaborating the practice work and practice colloquium.

Updating the student portfolio with the projects elaborated during the previous two semesters.

Seminar contents

-

Evaluation

The activity will be evaluated by the responsible teachers.

Selected bibliography



48.00

04_{year}
1st semester

PARAMETRIC DESIGN

Code **49.10**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar **-**

No. of hours project **-**

Discipline type **Elective**

Examination form **Colloquium**

Objectives

Theoretical and practical acquisition of knowledge specific to the parametric design in architecture.

Acquisition of the theoretical principles specific to the parametric design.

Integration of design and algorithmic thinking into architectural design flows.

Developing computer-aided design skills in Rhinoceros 3D - McNeel Roberts & Associates.

Responsible:

T. Assist. PhD Arch. Andrei Kiss

e-mail: andrei.kiss@me.com

Lecture / project contents

- C1 Introduction. Definitions: design, parametric, parametric design. (2 hours)
- C2 Theoretical framing of the parametric design in the scientific field (4 hours)
- C3 Interactive Architecture I
- C4 Interactive Architecture II
- C5 Organic Paradigm I
- C6 Organic Paradigm II
- C7 Philosophy in Formation of Form I
- C8 Philosophy in Formation of Form II
- C9 Digital Morphogenesis I
- C10 Digital Morphogenesis II
- C11 Experiments in digital space I
- C12 Experiments in digital space II
- C13 Contemporary examples I
- C14 Contemporary examples II

Seminar contents

-



Evaluation

Colloquium - Cumulative sequential assessment during the semester

Selected bibliography

- A. MENGES, S. AHLQUIST, *Computational Design Thinking*, John Wiley and Sons Ltd. Publication (2011) (OBLIGATORIE)
- M. DELANDA, *Deleuze and the Use of the Genetic Algorithm in Architecture* N. Leach, ed. Architectural Design (2002), 71(7), pp.117–120.
- M. DELANDA, *Immanence and Transcendence in the Genesis of Form*. South Atlantic Quarterly (1997), 96(3), pp.499–514.
- M. DELANDA, *Intensive science and virtual philosophy*, London: Continuum International Publishing Group. (2002)
- M. DELANDA, *Material Elegance*. Architectural Design (2007), 77(1), pp.18–23.
- M. DELANDA, *Philosophies of design, The Case of Modeling Software*. Verb - Architecture Boogazine (2001), pp.129–142.
- G. DELEUZE, & F. GUATTARI, *A thousand plateaus: capitalism and schizophrenia*, Minneapolis: Continuum International Publishing Group (2004).

49.10

ENVIRONMENTAL DESIGN

Code **49.20**

Semester **1**

Credits **2**

No. of hours/ lecture **28**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course aims the initiation in the field of environmental architectural space, the Assimilation of knowledge about the elements of the architectural space involved in creating the ambience. With this course it is aimed to set the stages of realization of an Environmental Design project, to analysis of an existing architectural space from the point of view of the environment: spatial relations, compositional relations, chromatic relations, texture, conditions of physical and psychic comfort. The stages of the Environmental Design project are followed.

Responsible:
Lect. PhD Arch. Dana Sorina Opincariu

e-mail: dana.opincariu@arch.utcluj.ro

Lecture / project contents

- C1 Introduction to the Architectural Space Ambience.
- C2 The environmental components of the architectural space.
- C3 The perception and the psychoplastic elements
- C4 The ambient composition in the interior and exterior architectural space.
- C6 Light and color in Architecture.
- C7 Methods of activating environmental stimuli.
- C8 Perceptual structure and behavior in the architectural environment.
- C9 Ambient characteristics of the private architectural space
- C10 The ambience of the public architectural space
- C11 Sustainability and architectural ambience principles.
- C12 The ambience of the scenic space - the space of the show.
- C13 Environmental features of architectural spaces in history
- C14 Environmental Design Project - conceptualization analysis, stages.
Trends and concepts in the context of contemporary space.

Seminar contents

-

Evaluation

Carrying out a paper with a theoretical part and a practical part - drawing, on a theme chosen from the themes presented at the course.



Selected bibliography

- G. AICHÎȚEI, *Frumosul dincolo de arta*, Meridian
- M. BEAZLEY, *Colour Healing Home*, Octopus Publishing Group, Great Britain, 2000 e-1988
- G. BROADBENT, R. BUNT, T. LORENS, *Semnificație și Comportament în mediul Construit*, Ed Tehnica – București-1985
- F. IONESCU, V. NASTASE, *Proiectarea Mobilei și Arhitectura Interioarelor*, Ed didactica și Pedagogica, București - 1970
- C. JUROV, *Arhitectura Ambientelor*, Capitel-2006
- N. KNOBLER, *Dialogul vizual*, Meridiane-1983
- R. KOOLHAS & CO, *15 books – floor, wall, ceiling, roof, door, window, façade, balcony, corridor, fireplace, toilet, stair, escalator, elevator, ramp*
- P. A. MICHELIS, *Estetica arhitecturii*, Meridiane-1982
- M. MITTON, *Interior Design – Visual Representation*, Wiley 2012

49.20

DESIGN IN ARCHITECTURE

Code **49.30**

Semester **1**

Credits **2**

No. of hours/ lecture **28**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

Acquiring theoretical knowledge in design and design practice.

Assimilation of the theoretical knowledge regarding evolution and the main theories in the field of design.

The ability to recognize design elements that can improve the design process specific to the architect.

Responsible:

Lect. PhD Arch. Silivan Moldovan

e-mail: silivan.moldovan@arch.utcluj.ro

Lecture / project contents

- C1 Introduction
- C2 History of design
- C3 The basics of perception - function vs. Form
- C4 Christology, psychoanalytic theories of stimulating creativity
- C5 The stages of the creation process
- C6 Semiotic and morphology
- C7 The role of technology in the development of design
- C8 The influence of marketing and marketing study on design
- C9 Marketing and social ethics
- C10 Advertising and advertising graphics
- C11 Brand, visual identity, style unit and their role on the perception
- C12 of architectural space
- C13 Design of architecture between details - furniture, carpentry, staircase as a sculptural element, access, etc.
- C14 Architecture and architectural space - treated as a design object
Urban design and environment

Seminar contents

-

Evaluation

Written exam with 5 questions, rated from 1 to 9, 1 point ex officio. Points for additional activity, accumulated over the semester, contribute to the final mark.



Selected bibliography

- R. ZAMFIR, M. MOLDOVAN, *Introducere in design*, Editura U.T.PRES, Cluj-Napoca, 2002, ISBN 973-8335-68-X
- D. POPESCU, *Principiile formei în product design* Editura U.T.PRES, Cluj-Napoca, 2007, ISBN 978-973-662-312-7
- D. DABNER, *Design grafic. Principiile si practica designului grafic*, Rao Books, București, 2006, ISBN 973-717-042-3
- H. A. SIMON, *The Science of Design: Creating the Artificial*, Design Issues Vol. 4, No. 1/2, *-Designing the Immaterial Society* (1988), pp. 67-82
- T. FRY, *Design Beyond the Limits*, 2011
- V. MARGOLIN, *The Politics of the Artificial: Essays on Design and Design Studies*, University Of Chicago Press, Chicago, USA, 2002, ISBN-13: 978-0226505046
- A. A. MOLES, *The crisis of functionalism*, Ulm 19/20, 1968
- M. VITTA, *The Meaning of Design*, Design Issues, Vol. 2, No. 2 (1985), pp. 3-8
- T. PARSONS, *Thinking: Objects, Contemporary Approaches to Product Design* (AVA Academia Advanced), Juli 2009

49.30

HISTORY OF ARCHITECTURE IN ROMANIA

Code **50.00**

Semester **1**

Credits **4**

No. of hours/ lecture **4 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course aims to get knowledge and understanding of the history of architecture on the territory of Romania. Through selected case-studies, the lectures present the evolution of architecture in its contemporary socio-cultural context, the styles, remarkable architects and prevailing theoretical notions.

Responsible:
Prof. PhD Arch. Virgil Pop

e-mail: arh.virgil.pop@gmail.com

Lecture / project contents

- C1 Antiquity Architecture in Dacia and Dobrogea
- C2 Early fortifications in Transylvania
- C3 Gothic
- C4 Development of settlements during the XIII-XV centuries
- C5 Medieval housing
- C6 Reformation and urban modernization
- C7 Fortifications and Castles
- C8 The Age of Stefan the Great
- C9 Architecture in Wallachia in XV-XVIIth century
- C10 Urban Baroque Architecture
- C11 The provincial Baroque
- C12 Neoclassicism and Romanticism in Transylvania
- C13 1900 national schools and architecture
- C14 Pre- and post-war Modernism

Seminar contents

The seminars consist in applicative assignments, whereby students learn to read a historic monument in its complex temporal and spatial evolution, preparing architectural drawings which highlight the building's successive transformations. Transylvanian mediaeval and early-modern churches, in urban and rural contexts are often selected as case studies, each student working on a different monument.

Evaluation

Written exam about and evaluation of the seminar assignments.W



Selected bibliography

- Ionescu, Grigore. *Arhitectura pe teritoriul Romaniei de-a lungul veacurilor*. București: Ed. Academiei, R.S.R., 1982.
- Ionescu, Grigore. *Istoria arhitecturii românești, din cele mai vechi timpuri până la 1900*. București: Cartea românească: 1987.
- Niedermeier, Paul. *Siebenbürgische Städte. Forschungen zur städtebaulichen und architektonischen Entwicklung von Handwerksorten zwischen dem 12. und 16. Jahrhundert*. București: Editura Kriterion, 1979.
- Niedermeier, Paul. *Städte, Dörfer, Baudenkmäler. Studien zur Siedlungs- und Baugeschichte Siebenbürgens*. Köln - Weimar - Viena: Böhlau, 2008.
- Vătășianu, Virgil. *Istoria artei feudale în Țările române*. București: Editura Academiei R.P.R., 1959.
- * Revista sITA - studies in History and Theory of Architecture: <https://sita.uauim.ro/>

50.00

THEORIES AND DOCTRINES IN CONTEMPORARY ARCHITECTURE

Code **51.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar **-**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course aims to spread knowledge and understanding of contemporary architectural speeches, to form a basic architectural culture for understanding the contemporary architectural landscape, to form a culture of architectural theory for the understanding of contemporary evolutions and to give the ability to make comparisons, critically analyze, and formulate views on contemporary themes.

Responsible:

Lect. PhD Arch.

Todoran Smaranda Maria

e-mail:

arh.smaranda.todoran@gmail.com

Lecture / project contents

- C1 Introductory course. The notion of architectural theory. 70s.
- C2 Critics of modernism: Venturi, Rossi and Taffuri, IUAV and Peter Eisenman.
- C3 The 70s. Critics of modernism: the crisis of meaning.
- C4 From critics of modernism to early postmodernism. Charles Jencks.
- C5 Modernism resists! SOM, Frei Otto, "British Renaissance
- C6 Post-modernism resists! Manifestations of post-modernism in
- C7 the 80s. New definitions. Opponents. 2 particular cases: Merida
- C8 and Venice
- C9 The golden age of the theory. French post-structuralism.
- C10 From Derrida to Deleuze. Geometry and autonomy.
- C11 Pragmatism and the "post-theory" period. OMA. Netherlands
- C11 Minimalism. Materiality and effects. Neomodernism
- C12 Minimalism is. Phenomenological architecture.
- C13 Sustainability and future of theory
- C14 Discussions.

Seminar contents

-

Evaluation

During the course, in the form of 6 tests.
At the end of the course, a text / architectural works
analysis paper will be delivered
In session, a minimum of 8 points in a + c will pass
an exam.

Selected bibliography

-H. F. MALLGRAVE, D. J. GOODMAN, *An Introduction to Architectural Theory: 1968 to the Present*, Wiley-Blackwell, 2011

Additional:

-*Theorizing a New Agenda for Architecture: an Anthology of Architectural Theory* 1965-1995. Kate Nesbitt, ed. New York, NY: Princeton -*Architectural Press*, 1996.

-*Architecture theory since* 1968. K Michael Hays, ed. Cambridge, MA; London: MIT Press, 1998.



51.00

SOCIOLOGY

Code **52.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2/week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

All human action is localized. Therefore, there is clearly a link between built spaces and human activities. The Sociology course aims to present some of these links, thus broadening the student's understanding of architectural and urban planning processes. It aims to offer a brief presentation of different concepts related to space and society. Starting from the fact that architecture and urban planning are social actions (they always have an effect on others), and the architect is a social actor, the course offers a toolbox of concepts and methods in order to understand some possible social effects of the architects' work.

Responsible:

Lect. PhD Arch. Dragos Dascalu

e-mail: Dragos.Dascalu@arch.utcluj.ro

Lecture / project contents

- C1 Introduction: What is sociology?
- C2 Architectural determinism (Determinism(s) , Utopia,
- C3 The Phalanstery Paradigm, The dangers of architectural determinism).
- C4 Power and the Production of Space (Discipline and
- C5 Normalization, Controlling society by controlling its space, Social space – Physical space, “(Social) space is a (social) product”)
- C6 The architect's social role in the XXIst Century
- C7 Community and Society
- C8 Public / Public Space – the space of society
- C9 Community / Commons – common space
- C10 Urban ecology. The Chicago School.
- C11 The two Romanias – historical overview – 1918 – 2000
- C12 The two Romanias – Today - Demographical Model, Economical Model, Value system.
- C13 The two Romanias – Magnet Cities (opportunities and issues)
The two Romanias – Small towns and Rural areas (opportunities and issues)
- C14 Sociological methods of research

Seminar contents

-

Evaluation

Written exam – short argumentative essay related to a current social problem related to urban planning or architectural processes.

Critical essay or book review.

Final grade = 0.4 x essay/review + 0.6 x exam

Selected bibliography

- S. ARNSTEIN, *A Ladder of Citizen Participation*, American Institute of Planning Journal(1969) , vol.35, nr.4, pp.216 – 224
- P. BLUNDELL JONES, D. PETRESCU, J. TILL, *Architecture and Participation*, Oxon, New York: Taylor and Francis(2005)
- R. BOUDON,F. BOURRICAUD, *A Critical Dictionary of Sociology*, Chicago: Routledge (1989) [1977]
- P. BOURDIEU, (editor), *La Misere du Monde*, Paris:Editions du Seuil (1993)
- M. BROADY, *Social Theory in Architectural Design* In: Gutman, R. (ed.) *People and Buildings*, London, New York: Basic Books (1972), pp.170-185
- V. BUCHLI, *An Archeology of Socialism*, Oxford, New York: Berg (1999)
- R. BURDETT, D. DEYAN SUDJIC (eds.). *Living in the Endless City. The Urban Age Project* by the London School of Economics and Deutsche -Bank's Alfred Herrhausen Society. London. Phaidon Press.
- D. COLLIN, *Marile notiuni filozofice. 2*. Societatea, puterea, statul, Iasi: Institutul European (1999) [1997]
- A. GIDDENS, *The Constitution of Society. Outline of a Theory of Structuration*, Cambridge, Oxford: Polity Press (1984)



52.00

INTERIOR ARCHITECTURE

Code	53.00
Semester	1
Credits	2
No. of hours/ lecture	2 / week
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Compulsory
Examination form	Colloquium

Responsible:
Lect. PhD Arch.
Paul Mihai Moldovan

e-mail:
paul.moldovan@arch.utcluj.ro

Objectives

The course aims learning the basic elements in the design process in the field of Architecture (interior), to gain knowledge of the evolution of the term Architect in relation to the evolution of the profession and the architecture education for the understanding of the contemporary context of Architecture (interior), to study of the different architectural elements (and specific finishes) and their relations, characteristics of these elements and specific execution techniques, to study of furniture elements involved in space planning inside, to follow the role of sanitary installations (IS), thermal (IT), electrical (IE) and ventilation (IV) in the design of the interior architectural space and to follow the role of catalog and decorative objects in interior design.

Lecture / project contents

- C1 The evolution of the architect profession in relation to the architecture education
- C2 Introduction to interior architecture
- C3 Furniture (in the context of the interior space)
- C4 Flooring. (in the context of the interior space)
- C5 Walls. (in the context of the interior space)
- C6 Gaps. (doors, windows, voids, etc. in the context of the interior space)
- C7 Ceilings. (in the context of the interior space)
- C8 Connections. (plinths, scaffolds, etc. in the context of the interior space)
- C9
- C10 Hygiene and maintenance spaces.
- C11 Horizontal and vertical movements. (in the context of the interior space)
- C12 Plumbing (IS), thermal (IT), electrical (IE) and ventilation (IV). (in the context of the interior space)
- C13 Choice of catalog elements in the interior architectural space. Choice of decorative elements in the interior architectural space
- C14 Interior Architecture Project: Stages. Transverse conclusion

Seminar contents

-

Evaluation

Ability to assimilate, understand and synthesize the notions taught / discussed at the course, Accuracy of information, The correctness of the terms, Structure of the work, quality of expression.

Selected bibliography

- G. ACHIȚEI, *Frumosul dincolo de artă*. București: Meridiane (1988)
- F. O. BANKS, *Modern eclectic*. Londra: Octopus Publishing, Group Limited. (2001)
- K. E. BARZMAN, *The Florentine Academy and the Early, Modern State: The Discipline of Disegno*, Cambridge: Cambridge University Press.(2000)
- J. BAUDRILLARD, *Sistemul obiectelor*. București: Echinox. (1996)
- B. BERGDOLL, *Bauhaus Multiplied: Paradoxes of Modernity*. (pp. 10-21).New-York: The Museum of Modern Art (2009)
- L. CALLEBAT, (Dir.) . *Histoire de l'architecte*. Paris: Flammarion. (1998)
- F.A. CERVER, *Interior design atlas*. Köln: Konemann Inc. (2000)
- F.A. CERVER, *Interior Design Atlas*. Konemann. (2005)



53.00

SPECIALISED DESIGN STUDIO - INTERIOR ARCHITECTURE

Code **54.00**

Semester **1**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **2 / week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

The project aims at the transformation a set of conditions into a spatial solution through the design process. It also targets the development of a specific professional culture, offering students a coherent system for the analysis of the interior architectural space. Moreover, the discipline provides a theoretic platform addressing the architectural project strategies, both during the formative years as well as within professional practice.

Responsible:

Lect. PhD Arch.

Paul Mihai Moldovan

e-mail:

paul.moldovan@arch.utcluj.ro

Coordinators

Teach. Assist. PhD Arch. Laura Patachi

Teach. Assist. PhD Arch. Alina Voinea

Arch. Fabian Luca

Lecture / project contents

- C1 Architecture project in a real-world context.
Urban Hotel Room - Indoor Architecture Project
- C2 Explore location and capture information. Desktop Documentation.
- C3 Achieving concept of interior architecture, communication and evaluation.
- C4 Developing interior architecture concepts.
Representation - the adequacy of speech and representation to the essence of the proposal.

Seminar contents

Individual and group discussions based on arguments and references. Crits, didactic and peer review. Comparative arguments.

Evaluation

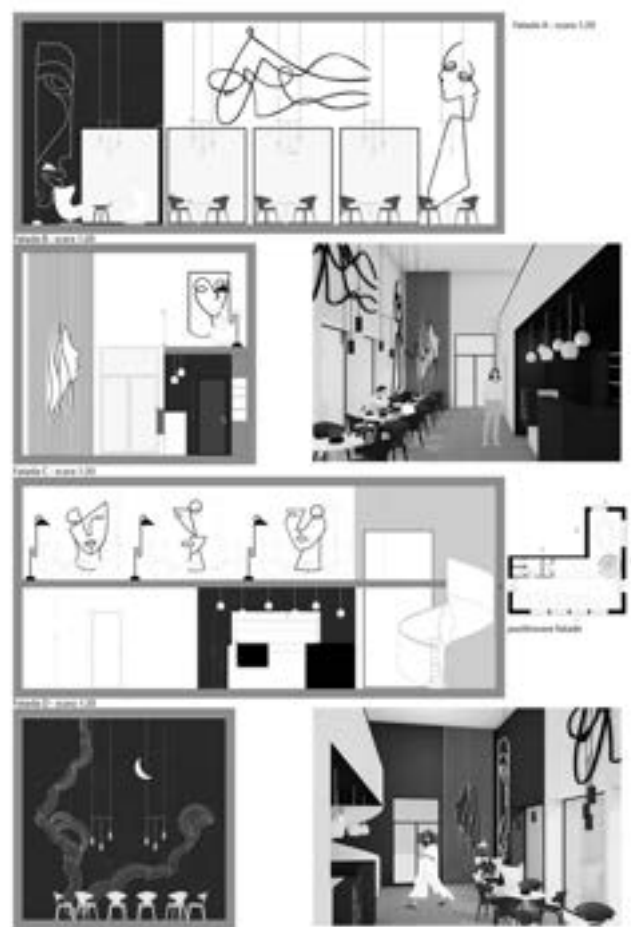
Evaluation and notation of projects by the teaching staff.

Selected bibliography

Domus, Italia: *Periodice de arhitectură, arhitectură de interior și design.*

Detail, Germania: *Periodice de arhitectură și arhitectură de interior.*

E. Croquis, Spania: *Periodice de arhitectură și arhitectură de interior.*



54.00

SPECIALISED DESIGN STUDIO - TECHNICAL DESIGN

Code **55.00**

Semester **1**

Credits **3**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **3 / week**

Discipline type **Compulsory**

Examination form **Project**

Objectives

The course aims the acquiring the knowledge needed to design buildings with the right and economic structure as well as electrical, thermal and sanitary installations, the ability to analyze in parallel the architectural requirements, the requirements of building the resistance structure, the installations and some details related to them, when designing a building, the pre-dimensioning elements of a resistance structure and the election and positioning of elements of Electrical, Thermal and Sanitary Plants, Assembly of Enclosures for a Building.

Responsible:

Lect PhD Eng. Radu Hulea

e-mail: radu.hulea@arch.utcluj.ro

Teaching team

Assoc.Prof. PhD Eng. Petre Rus

Lect. PhD Eng. Radu Hulea

PhD Eng. Lidia Lupan

Lect. PhD Eng. Călin Ciugudean

Lect. PhD Eng. Adriana Hădărean

T. Assist. PhD Eng. Constantin Cilibiu

Lecture / project contents

-

Seminar contents

- S1. Analysis of the structure of the spaces of the designed building
- S2. Pre-dimensioning a slab, a beam, a column, and a foundation.
- S3. Drawing up a layout plan of a floor plan, foundation plan, and foundation details.
- S4. The representation of the sanitary-technical installations, of the thermal installations and of the electrical installation related to the structure studied at the structures.
- S5. Details of trails, with sections on facades, planes and roof planes.

Evaluation

Quality of computational notes, timetables and activity during the semester.

The evaluation of the quality of the project at the specialties: structure, electrical, thermal, sanitary installations.

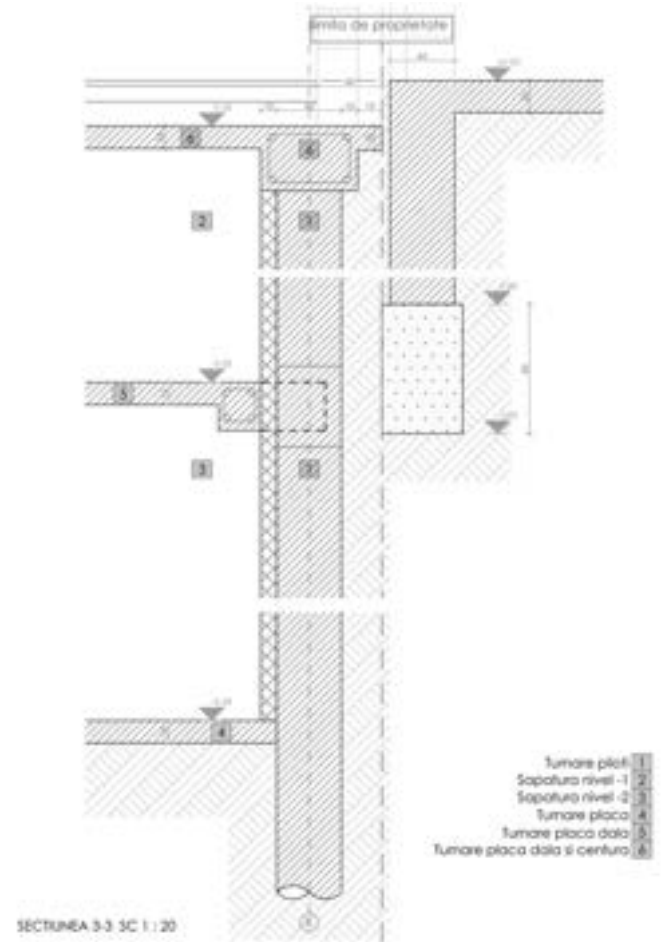
Selected bibliography

Notele de curs de la disciplinele de specialitate

Normativele specifice problemelor abordate.

Reviste de specialitate

Desen tehnic de instalații. Autor: Conf.dr.ing. Felicia Olariu, Sef lucr.dr.ing. Carmen Marza, Litoral UTCN, Cluj-Napoca, 1996.



55.00

DESIGN SYNTHESIS STUDIO 1

Code **56.00**

Semester **1**

Credits **13.0**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **10 / week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

O1 - Developing students' competencies in the field of architectural design by applying the design methodology to the themes of plurivalent programs.

O2 - The elaboration of a complex architectural project, as the final stage of an interdisciplinary process, started with the urbanism project. Detailing the architectural object by enumerating a project concept, establishing neighborhood relations with a proposed urban context, functional, structural and spatial solution according to the design theme and the norms in force.

Responsible:

Assoc.Prof. PhD Arch.

Octav Silviu Olănescu

e-mail:

octav.olanescu@arch.utcluj.ro

Lecture / project contents

Different public building types, such as offices, hotels, mediatheques etc. on complex urban sites.

Prof. PhD Arch. Mihaela Ioana Agachi

Lect. PhD Arch. Silivan Moldovan

Lect. PhD Arch. Silviu Aldea

Teach. Assist. PhD Arch. R areş Drăgan

Teach. Assist. PhD Arch. Alice Oprică

Arch. PhDs Maria Loşonţi

Arch. Andrei Bacoşcă

Arch. Csaba Lázár

Seminar contents

Architectural project: Exposition, applications, individual corrections, corrections in the collective, evaluation of the projects with public support.

Evaluation

Seminar: According to the design theme and the Regulation for Discipline Design Synthesis IV.



Selected bibliography

- E. Neufert, *Manualul arhitectului - elemente de proiectare și de construcție*, Alutus S.A., Miercurea Ciuc, 2004.
- D. Littlefield, *Metric Handbook- Planning and Design Data*, 3rd Edition, Elsevier, Oxford, 2008.
- G. Vais, *Programe de arhitectură*, UT Press, Cluj-Napoca, 2008.
- Reviste de arhitectură existente în Biblioteca facultății: *El Croquis*, *The Architectural Review*, *Detal* ș.a.
- Surse internet: *Archdaily.com*, *Architizer.com*, *Divisare.com* ș.a.

56.00

04_{year}
2nd semester

SPECIAL STRUCTURES

Code	57.10
Semester	2
Credits	2
No. of hours/ lecture	2 / week
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Elective
Examination form	Colloquium

Responsible:
Assoc. Prof. PhD Eng. Petru Rus
e-mail: petru.rus@arch.utcluj.ro

Objectives

The course aims the developing the capacity to analyze the behavior of structures for performing buildings. Developing the ability to intuitively approach the significant aspects that define the behavior of the building, to gain knowledge of the relevant aspects of the behavior of performing structures under load, to present the particularities of static compliance specific to performing structures, to raise the questions of how to optimize the resistance structure and to present the form-structure relationship

Lecture / project contents

Principles of approximate determination of the requirements in the elements of a structural assembly using the external static scheme
Structures for high buildings.
High grounded ground floor structures:
Functional, mechanical and structural criteria
Structural features of suspended roofs.
Suspended roofs stabilized with reinforced
Roofing with pretensioned network cables
Roofing of cable farms.
Roofs with combined systems
Stay cable systems.
Roofs of pre-stressed or leaked membranes.
Retractable structures.
Problems of the compliance of the marginal support structures
Arched structures
Structural assemblies with thin curved plates directly on foundations
Structural assemblies with thin curved plates resting on intermediate
Implications for overall conception
Functional, mechanical and deterministic criteria
Cut, pyramid, faceted systems.

Seminar contents

-

Evaluation

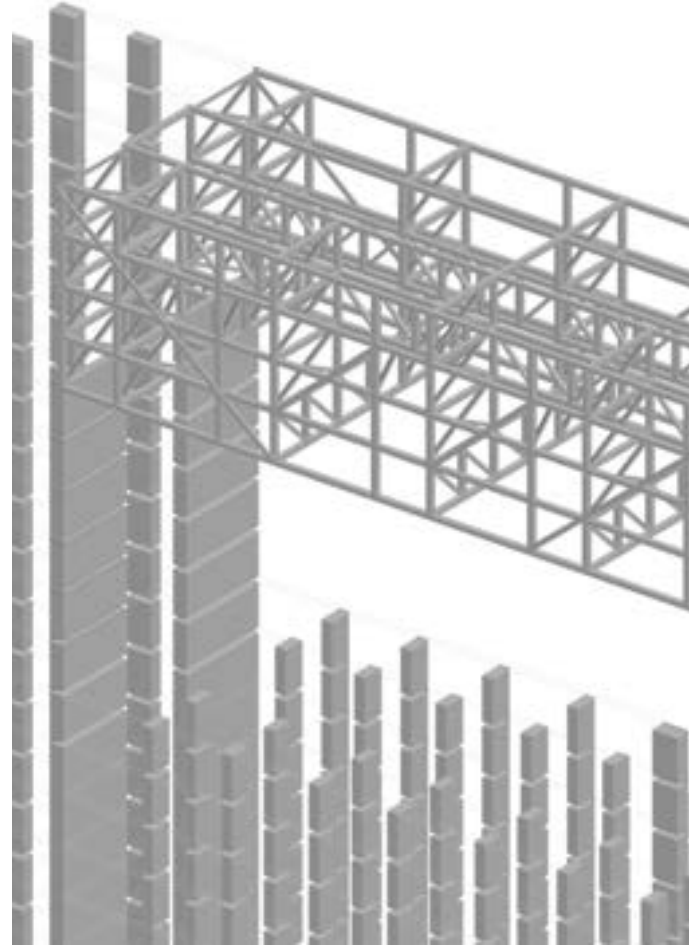
Analysis of two topics of theory and related practical aspects.

Selected bibliography

Kopenetz, Ludovic, Catarig, Alexandru. Teoria structurilor usoare cu cabluri si membrane, Cluj-Napoca: U.T.Press, 2006.

Kopenetz Ludovic, Pârv Bianca Roxana, Introducere în teoria structurilor înalte și a structurilor cu deschideri mari, Cluj-Napoca: U.T.Press, 2014.

Stoica, Daniel. Construcții civile : probleme și soluții moderne. București: Matrix Rom, 2014.



PATHOLOGY AND THERAPEUTICS OF HISTORIC STRUCTURES

Code **57.20**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course aims to create the ability to rehabilitate or modify the function of a construction, to analysis of the factors that caused degradation and to get knowledge of technical solutions necessary for the maintenance, repair or consolidation of building elements.

Responsible:

Assoc. Prof. PhD Arch. Socaciu Nicolae

e-mail: nicolae.socaciu@arch.utcluj.ro

Lecture / project contents

- C1 Maintenance and repair of buildings.
- C2 Accidents and damage in construction.
- C3 Building expertise.
- C4 Methods for consolidation of structures in masonry, reinforced concrete, metal and wood.

Seminar contents

-

Evaluation

Cours - Notes on topics : Written exam



Selected bibliography

- N. SOCACIU, *Patologia si terapeutica constructiilor*. UTCN, 1999.
- S. TOLOGEA, *Probleme privind patologia si terapeutica constructiilor*. ET Buc. 1976.
- C. NISTOR, s.a. *Consolidarea si intretinerea constructiilor*. ET Buc. 1991.
- G. ARSENE s.a. *Solutii de consolidare a constructiilor avariate de cutremure*. ET Buc. 1997.
- Journal articles.

57.20

HISTORIC BUILDING RECOVERY

Code **57.30**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

The course aims to ensure the knowledge needed to identify load bearing structures in historical buildings, the study of resistance and stability, but also of preserving heritage value, to gain knowledge of the main tools for investigating monuments and the specific role of the architect in their use, to get knowledge of the construction of bearing structures in historical buildings, to present materials used in historical structures and technologies for building historical structures. Types of interventions for monuments, historical buildings and to get knowledge of the protection of historical monuments in Romania and internationally.

Responsible:

Lect. PhD Eng. Imola Kirizsan

e-mail: Imola.Kirizsan@arch.utcluj.ro

Lecture / project contents

- C1 Defining Course Objectives. Terminology presentation specific
- C2 Structural bearing subassemblies
- C3 Historical roofs
- C4 Historical floors and arcades
- C5 Historical support systems
- C6 Historical foundations
- C7 Assemblies of historic bearing structures
- C8 Ground floor assemblies of historic bearing structures
- C9 Storied floor assemblies of historic bearing structures
- C10 Types of interventions
- C11 Intervention on historical roofs
- C12 Intervention on historical floors and arcades
- C13 Intervention on historical support systems
- C14 Intervention on historical foundations

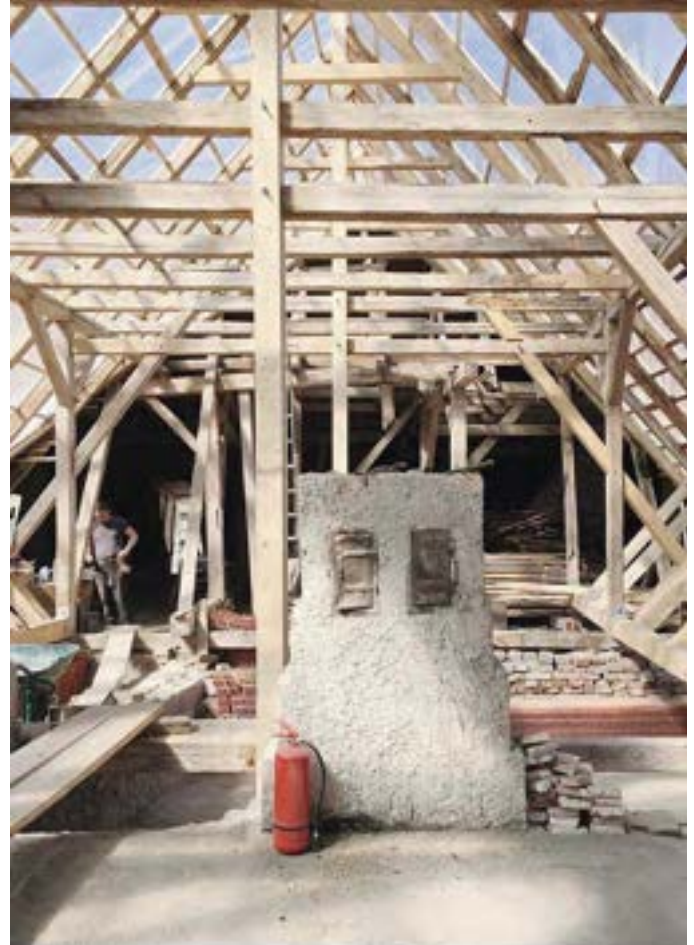
Seminar contents

-

Evaluation

Active attendance at the course Presentations
Project 1 and Project 2.

Colloquium - two checks in written form or a paper
/ essay.



Selected bibliography

- M. MITTAG, *Baukonstruktionslehre/Gütersloh*, C. Bertelsmann Verlag, 1952 *Evaluation and Strengthening of Existing Masonry structures* Bagneux, Rilem publications SARL, Proceedings (Pro 3), Edited by L. Binda and. C. Modena, 2002
- B. SZABÓ, H. MANIU, I. KIRIZSÁN, I. KIRIZSÁN, *Conformarea mecanică a structurilor portante istorice* * A történeti tartószerkezetek mechanikai kialakítása * *Mechanical conformation of historic load-bearing structures*, Cluj-N., Ed. UTILITAS, 2003
- B. SZABÓ, *Dicționar ilustrat de structuri portante istorice* Cluj-N., Ed. UTILITAS, 2004
- B. SZABÓ, I. KIRIZSÁN, *Dicționar ilustrat de șarpante istorice* Cluj-N., Ed. UTILITAS, 2011
- Y. M. FROIDEVAUX, *Techniques de l'architecture ancienne – construction et restauration*/ Liège, Solédi, 1985
- F. W. B. CHARLES, M. CHARLES, *Conservation of Timber Buildings*, Shaftesbury, Donhead Publishing Ltd., 1998

57.30

URBAN COMPOSITION

Code **58.10**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course aims to get knowledge of the formal aspects to be considered in city planning and planning, of the elements that make up the city, of compositional principles, of urban compositional models and to develop a specific professional culture by analyzing examples of traditional, modern and contemporary practice.

Responsible:

Assoc. Prof. PhD Arch. Andreea Milea

e-mail: andreea.milea@gmail.com

Lecture / project contents

- C1 Getting Started
- C2 Form and space
- C3 Compositional principles
- C4 The organic model
- C5 The grid pattern
- C6 The diagrammatic model
- C7 The monumental model
- C8 Urban silhouette
- C9 Public space: the market
- C10 Public space: street
- C11 Public space: the park
- C12 Urban divisions
- C13 The city's limit
- C14 COLLOQUIUM

Seminar contents

-



Evaluation

Written verification during the semester, oral verification, within the course, of individual studies, oral verification at the colloquium of individual studies completed only at the end of the semester



Selected bibliography

- F. D. K. CHING, *Architecture: form, space & order* (Van Nostrand Reinhold, 1979)
- J. GEHL, *Orașe pentru oameni* (Igloo Media, București, 2012)
- J. GEHL, *Viața între clădiri. Utilizările spațiului public* (Igloo Media, București, 2011)
- J. GEHL, B. SVARRE, *Cum se studiază viața urbană* (Igloo Media, București, 2015)
- K. LYNCH, *Imaginea orașului* (Revista URBANISMUL, București, 2012)
- K. LYNCH, *A Theory of Good City Form* (MIT Press, Cambridge MA and London 1981)
- S. KOSTOF, *The City Assembled: Elements of Urban Form through History* (Thames & Hudson, 2005)
- S. KOSTOF, *The City Shaped: Urban Patterns and Meanings Through History* (Thames & Hudson, 1999)
- R. KRIER, *Town Spaces: Contemporary Interpretations in Traditional Urbanism* (Birkhäuser- Publishers for Architecture, Basel Berlin Boston, 2006)

58.10

URBAN STRUCTURES

Code **58.20**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course aims to identify and understand the challenges of the architect-urbanist profession in the problems of the dynamics of urban form and structure, to acquire awareness of the importance of the multidisciplinary approach in urban planning and an informed consideration of urban restructuring projects, both in academic urban planning workshops and in future professional work.

Responsible:
Assoc. Prof. PhD Arch.
Vlad Sebastian Rusu

e-mail: vlad.rusu@arch.utcluj.ro

Lecture / project contents

- C1 Course Introduction.
- C2 Urban territory, urbanization process, conditioning and manifestations.
- C3 The system of urban activities within the city.
- C4 Urban morphology, morphological methods of analysis, application of methods of spatial analysis.
- C5 Case study - application of a spatial body analysis method.
- C6 Urban Structure - Definitions, Urban Spatial Structure - Urban
- C7 Functional Structure.
- C8 Urban texture Limits of urban structure. Structures of structural organization.
- C9 Case studies on urban structure and approaches.
- C10 Phenomenon and urban form - definitions, Dynamics of urban form.
- C11 Urban spatial differentiation - homogeneous space,
- C12 heterogeneous space, selection in urban space. Case studies.
- C13 Particular value of urban form - character and specificity. Case Study.
- C14 Urban Restructuring - Case Studies.

Seminar contents

-

Evaluation

Written exam



Selected bibliography

- S. KOSTOF , *The City Shaped: Urban Patterns and Meanings Trough History*, Ed. Paperback, Londra, 2007.
- K. LYNCH, G. HACK, *Site Planning*, Ed. MIT Press, Cambridge, 1984.
- F. MACHEDON, *Metodă de analiză morfologică a ţesuturilor urbane*, Ed. U.A.U.I.M., Bucuresti 2006.
- A. STAN, C. IONIȚĂ, *Morfologie urbană*, Ed. U.A.U.I.M., Bucuresti - 2014.
- Ş. GHENCIULESCU, *Oraşul transparent: limite şi locuire*, Ed. U.A.U.I.M., Bucuresti - 2008.

58.20

DIGITAL FABRICATION

Code	58.30
Semester	2
Credits	2
No. of hours/ lecture	2 / week
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Elective
Examination form	Colloquium

Objectives

The course aims providing comprehensive background about the principles, phases, methods and techniques of digital fabrication, in its multiple relations with the field of architecture.

Responsible:
to be specified

e-mail:

Lecture / project contents

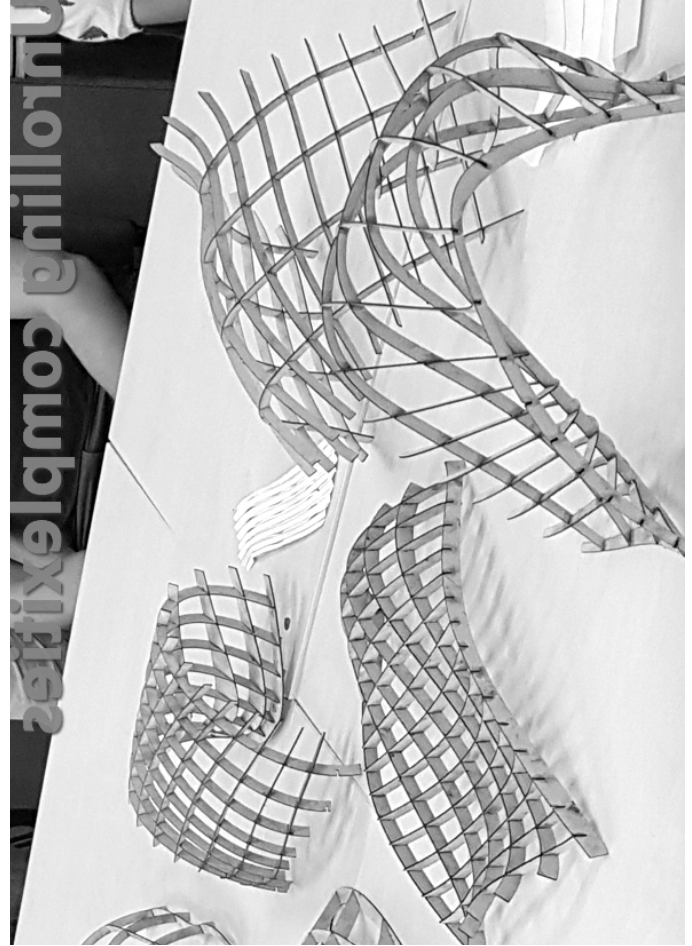
- C1 Introduction
- C2 Systems, machines and instruments
- C3 Algorythms
- C4 Morphogenesis
- C5 Forming
- C6 Tessalating
- C7 Folding
- C8 Principles of digital fabrication
- C9 Rapid prototyping
- C10 3D scanning
- C11 Further case-studies
- C12 Theorising digital fabrication
- C13 Conclusions
- C14 Colloquium

Seminar contents

-

Evaluation

Written exam



Selected bibliography

Caneparo, Luca. *Digital Fabrication in Architecture, Engineering and Construction*. Dordrecht: Springer, 2014.
Available on-line at: <https://www.springer.com/gp/book/9789400771369>.
Dunn, Nick. *Digital Fabrication in Architecture*. Londra: Laurence King Publishing Ltd, 2012.
Iwamoto, Lisa *Digital Fabrications: Architectural and Material Techniques*. New York: Princeton Architectural Press, 2009.

58.30

RESTORATION OF HISTORIC BUILDINGS

Code **59.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2/week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course aims the awareness of the importance of protecting and capitalizing on historical monuments. Study of various aspects of restoration of historical monuments, the Assimilation of monument and restoration concepts, knowledge of the factors that can aggravate monuments, knowledge of research undertaken to restore monuments, knowledge of the categories of restoration work, knowledge of constructive systems and traditional building materials, conservation techniques, and repairs needed in historical building interventions, developing of a specific professional culture by analyzing examples of traditional, modern and contemporary practice.

Responsible:

Lect. PhD Arch. Andreea Milea

e-mail: andreea.milea@gmail.com

Lecture / project contents

- C1 Introduction
- C2 The notion of monument and its evolution
- C3 The notion of restoration and its evolution
- C4 Aggression of the environment on monuments
Human aggression on monuments
- C5 Researches related to restoration work
- C6 Categories of restoration work: Part I
- C7 Categories of restoration work: Part II
Construction systems and historical building materials:
masonry and plastering
- C8 Construction systems and historical building materials: roofs,
- C9 floors, floors, exterior pavements
- C10 Construction systems and historical building materials: doors,
windows, stairs
- C11 Construction systems and historical building materials: wooden
constructions
- C12 constructions
- C13 Restoration of urban space
- C14 Restoration of historic gardens

Seminar contents

-

Evaluation

Cours: written verification during the semester, studies developed according to topics announced at the end of each course and presented orally within the time available



Selected bibliography

- J. ASHURST, *Practical Building Conservation: English Heritage Technical Handbook. Vol. 1: Stone Masonry. Vol. 2: Brick, Terracotta and Earth. Vol. 3: Mortars, Plasters and Renders. Vol. 4: Metals. Vol. 5: Wood, Glass and Resins and Technical Bibliography* (Ashgate Publishing Limited, Aldershot, 2005)
- F. CHOAY, *Alegoria patrimoniului* (Simetria, București, 1998)
- G. CURINSCHI VORONA, *Arhitectură Urbanism Restaurare* (Editura Tehnică, București, 1996)
- J. HÜLSEMANN, *Casa țărănească săsească din Transilvania. Ghid pentru restaurarea caselor vechi* (Simetria, Sibiu, 2014)
- A. MILEA, D. POP, *Despre releveu. Practici de vară în Házsongárd* (U.T.Press, Cluj-Napoca, 2012)
- V. POP, *Istoria conservării* (U.T. Press, Cluj-Napoca, 2002)
- B. SZABÓ, *Introducere în teoria reabilitării structurilor de rezistență istorice* (Utilitas, Cluj-Napoca, 1998)
- Caietele restaurării. colecția 2013-2017*

59.00

STRUCTURAL ENGINEERING THEORY 3

Code	60.00
Semester	2
Credits	4
No. of hours/ lecture	2 / week
No. of hours/ seminar	2 / week
No. of hours project	-
Discipline type	Compulsory
Examination form	Exam

Objectives

The course aims acquiring the knowledge needed to construct bearing structures in terms of mechanical strength and stability, understanding the impact of resistance and stability requirements in architectural design, acquiring compliance and sizing criteria for elements, subassemblies, simple, reinforced and prestressed concrete structure assemblies, metal, wood, masonry, to gain knowledge of the behavioral particularities of the bearing structure in frames, diaphragms or dual structures. It is followed to gain mastery of specialized terms and representations, to master simple methods of pre-dimensioning structural elements and acquisition of specific properties of different materials used in bearing structures and assimilation of technologies for carrying the load bearing structures.

Responsible:
Lect. PhD Eng. Imola Kirizsan

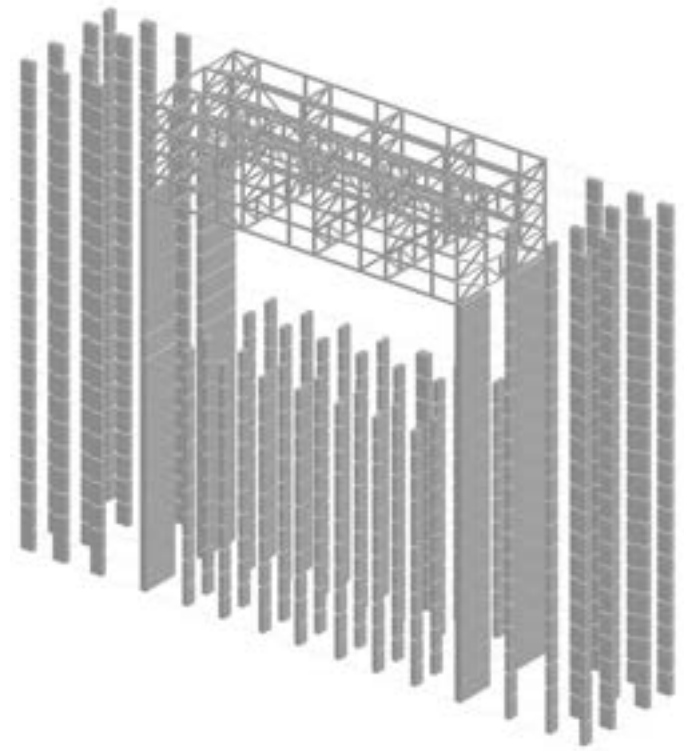
e-mail: i_kirizsan@utilitas.ro

Lecture / project contents

- C1 Recapitulation / Introduction
- C2 Roof structures. Underbody assemblies.
- C3 Planing subassemblies. Flat planes.
- C4 Carrier support subassemblies.
- C5 Foundation subassemblies. Foundations, Elevations
- C6 Steps of structural structure synthesis.
- C7 Upper and large openings ground floor assemblies
- C8 Bottom grounded structures
- C9 Hinged Structure Assemblies
- Recapitulation

Seminar contents

- S01 - Construction systems of roofs, roof structures
- S02 - Systems of floor plans
- S03 - Constructive systems of support subassemblies
- S04 - Presentation of simple methods of pre-dimensioning of the floors and the roof
- S05 - Starting from the architectural part of a building simple, small, it is proposed to design the appropriate resistance structure, using masonry, wood and / or concrete materials, taking into account site conditions.
- S06 - Structural interventions on existing buildings. Warehouse issues.



Evaluation

- Cours: Final written and oral examination (minimum grade 5)
- Seminar: Continuous tests. (minimum mark 5)

Selected bibliography

- AL. CIȘMIGIU: Teoria structurilor. Note de curs ed. I.A.I.M. București 1978;
- V. GIONCU, *Teoria structurilor. Note de curs* ed. I.P. Timișoara 1979;
- M. MIHAILESCU, *Construcții din beton armat și precomprimat* ed. I.P. Cluj-N. 1983;
- N. HAWKES, *Structures. The way things are built*. Ed. Macmillan New York, 1990;
- F. CHING, C. ADAMS, *Building construction illustrated*, Van Nostrand Reinhold New York, 1991;
- F. CHING, *A visual dictionary of Architecture*, Van Nostrand Reinhold New York, 1994;
- B. SZABÓ, *Teoria structurilor. vol. I. Elemente structurale*; ed. Utilitas Cluj-N. 1997;
- M. CRISAN, *Statica formelor construite. Note de curs 2009-2010*, ed. UAIM, București, 2010
- B. SZABÓ, *Elemente și structuri de beton armat* ed. I.P. Cluj-N., 1985
- R. CRIȘAN, *Construcții din lemn*, ed. UAIM, București, 2003
- R. CRIȘAN, *Construcții din oțel*, ed. UAIM, București, 2003

60.000

PHISYCS OF CONSTRUCTION AND URBAN ENVIRONMENT

Code **61.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course aims the developing skills in the areas of hygrothermics, acoustics and natural lighting in support of professional training, the assimilation of the theoretical knowledge regarding the basic notions in the field of building physics and the ability to perform preliminary calculations in the areas of hygrothermics, acoustics and natural lighting.

Responsible:

Lect. PhD Arch.

Ioana Madalina Moldovan

e-mail:

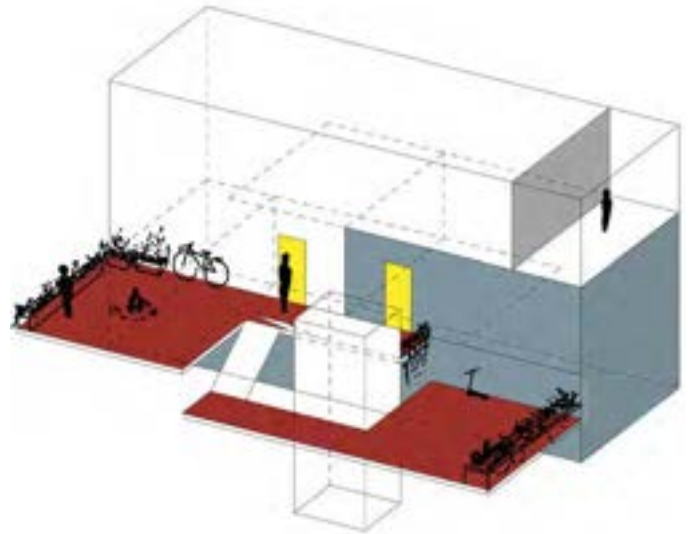
ioana.Muresanu@ccm.utcluj.ro

Lecture / project contents

- C1 Introduction. Overview - Objectives of the course and course.
- C2 Current issues of hygrothermics, acoustics and natural lighting
- C3 Thermal comfort. Thermal transfer. Condensation. Thermal bridges.
- C4 Practical Course: .
- C5 Practical course: Verification of the degree of thermal protection.
- C6 Practical Course: Calculation of water vapor diffusion
- C7 Practical course: The annual heat demand of a building Q.
- C8 Acoustics. General. Sound - propagation. Sound absorption.
- C9 Sound insulation. Materials and structures.
- C10 Indoor and outdoor acoustic protection. Examples.
- C11 Natural light in architecture.
- C12 Shadow diagram. Projection chart. The shadow mask.
- C13 Selective comfort of the sun, made with the projection diagram and the shadow mask.
- C14 Complex examples: Intelligent constructions. Intelligent enveloping elements.

Seminar contents

-



Evaluation

Written test and support

- Solving three theory points
- Solving a calculation example

Selected bibliography

- H. ANDREICA, C. MUNTEANU, I. MURESANU , L. MOGA, R. TAMAS-GAVREA, *Constructii civile*, Ed. U.T.Press, Cluj-Napoca, 2009;
- E. COMSA, I. MOGA, *Constructii civile – Higrotermica si acustica cladirilor*, vol. 2, Ed. U.T.C.-N., Cluj-Napoca, 1992;
- M. STAN, *Acustica pentru arhitecti*, Ed. Fundatiei Romania de Maine, Bucuresti, 2009;
- V. FOCSA, *Higrotermica si acustica cladirilor*, Ed. Didactica si Pedagogica, Bucuresti, 1975;
- R. PANA, *Teorie, metoda si tehnologie in protectia acustica*, Ed. Universitara Ion Mincu, Bucuresti, 2008;
- D. VERNESCU, A. ENE, *Insoirea si iluminarea naturala in arhitectura si urbanism*, Ed. Tehnica, Bucuresti, 1977;
- M. MIERLITA, G. VASILESCU, *Iluminarea naturala si artificiala la cladirile civile si de productie*, Ed. Tehnica, Bucuresti, 1984;
- Standarde, normative si reglementari tehnice specifice.*

61.00

SPECIALISED DESIGN - URBAN PLANNING 2

Code **62.00**

Semester **2**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **3 / week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

It is aimed to acquire the knowledge, skills, abilities and skills necessary for the architect whose professional activity is also exercised in the field of urban planning, to familiarize through the project with the methods, conventions and normative acts involved in the design of residential areas at the PUZ level (Zonal Urban Plan), to elaborate of the urban planning project of a residential area at differentiated scales: 1: 2000 - 1: 500, to relate to the existing normative framework on urban planning and its application within the project, to familiarize with the roles of the different actors involved in the elaboration of an urbanistic project.

Responsible:

Assoc. Prof. PhD Arch. Octav Silviu
Olănescu

e-mail:

octav.olanescu@arch.utcluj.ro

Coordinators:

Prof. PhD Arch. Iancu Adrian
Lect. PhD Arch. Silivan Moldovan
Teach. Assist. PhD Arch. Alice Florean
Teach. Assist. PhD Arch. R areş Drăgan
Arch. Rodica Codoreanu
Arch. Lucian Simu
Arch. Călin Spănu

Lecture / project contents

One semester project in three phases:

Urban Restructuring

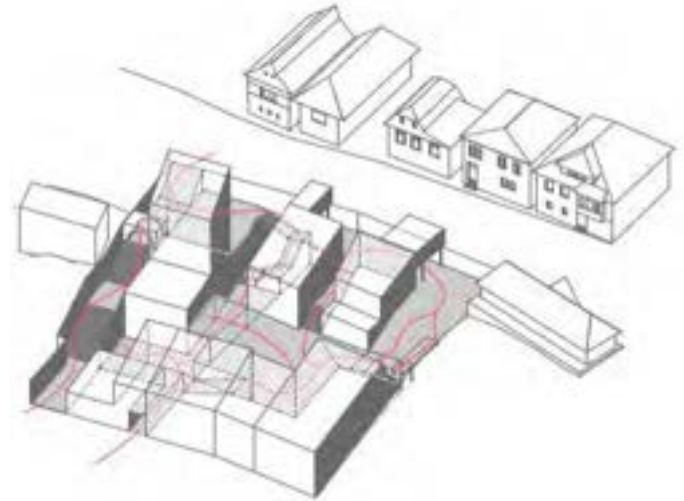
Phase 1 - Analysis of the existing situation and making a documentary map

Phase 2 - Designing a guideline scheme and phasing out the intervention

Phase 3 - Detail and completion of the urban planning project

Seminar contents

-



Evaluation

Applications: According to the design theme and the design regulations at the faculty level.

Oral support of the project, in its various intermediate phases and in the final one.

Selected bibliography

- Ghid privind metodologia de elaborare și conținutul cadru al planului urbanistic zonal*, MLPAT, București, 2000.
- Legislație privind urbanismul*, Matrix Rom, București, 2005.
- S. BELL, *Elements of Visual Design in the Landscape*, Spon Press, London and New York, 2004.
- English Partnerships and the Housing Corporation*, Urban Design Compendium, Volumele 1 și 2, 2007.
- D. MANGIN, PH. PANERAI, *Projet urbain*, Ed. Parentheses, Marseilles 1999.
- MINISTERUL LUCRĂRILOR PUBLICE ȘI AMENAJĂRII TERITORIULUI, *Ghid privind reglementarea dezvoltării urbane prin operațiuni de parcelare și reparcelare a terenurilor introduse în intravilan*, iunie 2002.
- J. MOZAS, *Density: new collective housing*, a+t Ediciones, 2006.
- J. O'ROURKE, ed., *Place Making. Celebrating Quality and Innovation in Urban Design*, RUDI (Resource for Urban Design Information) și Academy of Urbanism, London, 2009.

62.00

DESIGN SYNTHESIS STUDIO 2

Code **63.00**

Semester **2**

Credits **13**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **12 / week**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

The studios aims to develop students' competencies in the field of architectural design by applying the design methodology to the themes of plurivalent programs, to elaborate of a complex architectural project, as the final stage of an interdisciplinary process, started with the urbanism project. Detailing the architectural object by enumerating a project concept, establishing neighborhood relations with a proposed urban context, functional, structural and spatial solution according to the design theme and the norms in force.

Responsible:

Assoc.Prof. PhD Arch.

Octav Silviu Olănescu

e-mail:

octav.olanescu@arch.utcluj.ro

Lecture / project contents

Architectural project: Exposition, applications, individual corrections, corrections in the collective, evaluation with public support of the projects.

Prof. PhD Arch. Mihaela Ioana Agachi

Lect. PhD Arch. Silivan Moldovan

Lect. PhD Arch. Silviu Aldea

Teach. Assist. PhD Arch. R areş Drăgan

Teach. Assist. PhD Arch. Alice Oprică

Arch. PhDs Maria Loşonţi

Arch. Andrei Bacoşcă

Arch. Csaba Lázár

Seminar contents

-

Evaluation

Seminar/ architectural project : - According to the design theme and the Regulation for Discipline Design Synthesis IV : - Project Support Assessment



Selected bibliography

- E. NEUFERT, *Manualul arhitectului - elemente de proiectare și de construcție*, Alutus S.A., Miercurea Ciuc, 2004.
- D. LITTLEFIELD, *Metric Handbook- Planning and Design Data*, 3rd Edition, Elsevier, Oxford, 2008.
- G. VAIS, *Programe de arhitectură*, UT Press, Cluj-Napoca, 2008.
- Reviste de arhitectură existente în Biblioteca facultății: El Croquis, The Architectural Review, Detail ș.a.
- Surse internet: Archdaily.com, Architizer.com, Divisare.com ș.a.

63.00

PRACTICAL ACTIVITY 4

Code **64.00**

Semester **2**

Credits **3**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **30**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

The course aims to gain the ability to interact with the architect at all levels of the profession, to understand the steps to design a project, to identify the stages of scientific material development and to understand the amplitude of efforts to develop cultural or scientific events.

Responsible:

Assoc.Prof. PhD Arch.

Octav Silviu Olănescu

e-mail:

octav.olanescu@arch.utcluj.ro

Prof. PhD Arch. Mihaela Ioana Agachi

Lect. PhD Arch. Silivan Moldovan

Lect. PhD Arch. Silviu Aldea

Teach. Assist. PhD Arch. R areş Drăgan

Teach. Assist. PhD Arch. Alice Oprică

Arch. PhDs Maria Loşonţi

Arch. Andrei Bacoşcă

Arch. Csaba Lázár

Lecture / project contents

Workshops, working groups, conferences, projects, events.

The practical activity provides students with the opportunity of applying and developing the in-school-acquired abilities and knowledge base in the frame of real projects, programmes, workshops, events and / or publications, thus enabling them to develop interaction skills at a diverse range of professional levels.

Updating the student portfolio with the projects elaborated during the previous two semesters.

Seminar contents

-

Evaluation

The evaluation will be based on the degree of involvement in the proposed activities.



Selected bibliography

Standards for performance criteria specific to stairs and ramps for pedestrian traffic in buildings: Bucharest: Fast Print, 2004.

Norms regarding the design of civil buildings from the point of view of the safety requirement in operation: Indicative: NP 068-02, Bucharest: Fast Print, 2006.

J. FLEMING, H. HONOR, *The Penguin Dictionary of Architecture*, London: Penguin Books, 1966.

VITRUVIUS, M. POLLIO, *The Ten Books on Architecture / Vitruvius Pollio*; translated by Morris Hicky Morgan, 1960.

64.00

05_{year}
1st semester

THE CONTEMPORARY CITY

Code **65.10**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course aims to give knowledge and understanding of specific concepts, theories and basic methods in contemporary urban planning and their appropriate use in professional communication. Understanding the way of conceiving the contemporary urban space - as a space of a community with specific identity, the result of a historical becoming. Understands how specific historical, geographical, economic, social, and cultural aspects influence the genesis and evolution of the contemporary city, to analyse the elements specific to the existing urban framework and to carry out sequential analysis studies of a street (recognizing the specific human perception of urban space on the pedestrian scale) in the global context of the city.

Responsible:

Lect. PhD Arch. Silivan Moldovan

e-mail: silivan.moldovan@arch.utcluj.ro

Lecture / project contents

- C1 Introductory course, presentation of the discipline.
 - C2 Ways to analyze urban landscape and qualitative analysis
 - C3 The maps of urbanism and how they have influenced the
 - C4 city's image.
 - C5 Evolution of concepts of spatial organization of cities – exam-
 - C6 ples.
 - C7 Urban density issues.
 - C8 Utopias and Distopias - The Upper Community Future imagined versus reality.
 - C9 High Buildings in the Contemporary City Context.
 - C10 Policies for Compact Towns and Mega Cities (Problems and Solutions).
 - C11 Functions of the city, central area of the city, iconic landmarks, public space.
 - C12 Sustainability, globalization and neoliberalism. The city's image and its relation to the valuable elements of the context (soil, water, lighting, urban ventilation and urban silhouette).
 - C13 Urbanism in free zones or former industrial areas – examples.
 - C14 Interventions in areas of historic value.
- Submission of additional topics and Conclusions

Seminar contents

-

Evaluation

Written exam with 5 questions, rated from 1 to 9, 1 point ex officio. Points for additional activity, accumulated over the semester, contribute to the final mark.

Selected bibliography

- K. LYNCH, *Imaginea Oraşului*, Registrul Urbaniştilor din România, 2012
- CHOAY F., *L'urbanisme - Utopies et réalités*, Ed. du Seuil, Paris 1965
- PANERAI Ph., CHASTEX J., DEPAULE J-C., *Forme urbaine - de l'ilot à la barre*, Ed. Dunod, Paris 1977
- PANERAI Ph., DEPAULE J-C., DEMORGEON M., *Analyse Urbaine*, Parentheses Editions, 1999
- K. SPIRO, *The City Shaped - Urban Patterns and Meanings Through History* Thames and Hudson Ltd, London 1991
- Hall Peter - *Oraşele de mâine*, Ed. All Educational, Bucureşti 1999
- D. THOMAS, *The modern city revisited*, Spon Press, N.Y 2000
- HAROUEL J. L., *Istoria urbanismului*, Ed. Meridiane Bucureşti 2000
- CANTACUZINO G.M., *Despre o estetică a reconstrucţiei*, Ed. Paideea, Bucureşti 2001
- BENEVOLO L., *Orasul in istoria Europei*, Ed. Polirom Iasi 2003
- AGACHI M.I.M., *Clujul modern - aspecte urbanistice*, UTPress Cluj Napoca 2004



65.10

HUMAN SETTLEMENT STRATEGY

Code **65.20**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

O1. Acquiring theoretical knowledge about the existence and role of regional / national / European strategies and planning.

O2. Understanding the impact of implementing a plan over a period of time on a territory.

O3. Identifying bodies responsible for the implementation and implementation of urban strategies and policies.

O4. Identifying good practice in European territory.

O5. Understanding the macro levels of regional, national and European strategic planning and planning.

O6. Developing strategic thinking.

Responsible:

Teach. Assist. PhD Arch. Rareș Dragan

e-mail: raresv.dragan@gmail.com

Lecture / project contents

C1 Introductory course

C2 Legislative framework

C3 Territorial Development Strategy of Romania

C4 National Planning Plan – PATN

C5 Area Planning Plan – PATZ

C6 Planning of the county territory – PATJ

C7 Urban Strategic Planning

C8 Mobility and urban remodeling – Cluj

C9 European dimension - US space strategy and development policies

C10 Regional development strategies. Good Practices. Case studies.

C11 Promotion and regional competition - ExpoREAL; Mipim

C12 Urbanization and Quality of Life

C13 Sustainable Urbanization

Seminar contents

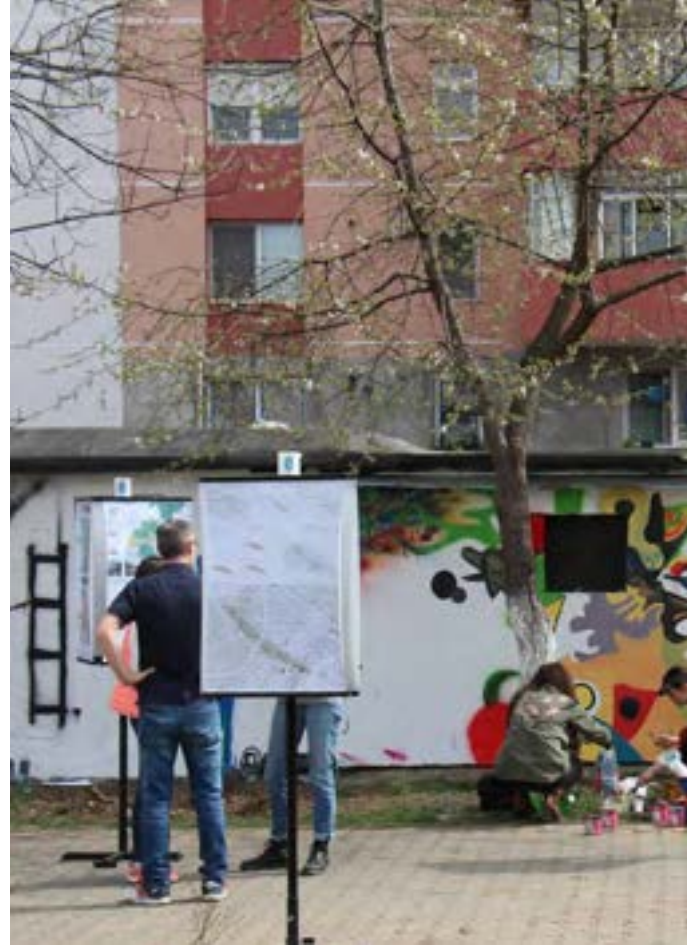
-

Evaluation

Cours: active presence at the course or written exam - 8-10 questions ability to get a grade during the semester - attention and vision questions at the end of the course.

Selected bibliography

- L. INAĂȘI, *Planificarea strategică urbană - un model*, București , Ed. Universitară Ion Mincu, 2014
- Strategia de dezvoltare strategică a României*, Quattro design, iunie 2014
- Enhanced Spatial Planning as a precondition for sustainable Urban Development*, Raport Banca Mondială, 2013
- Legea 350/6 iulie 2001 cu completările ulterioare
- NEGULESCU, M.H., *Practica urbanistică de remodelare sustenabilă a mobilității*, București, Ed. Universitară Ion Mincu, 2011
- NEGULESCU, M.H., *Mobilitate și formă urbană*, București, Ed. Universitară Ion Mincu, 2011
- MINEA, E.M., *Suport curs: Urbanism și amenajarea teritoriului*, UBB, 2012
- STOIAN I., CALCIU D., *Orașul posibil*, Ed. Tact, 2012
- MONTGOMERY C., *Orașul fericit*, trad. M. ZIPIȘI, București, Ed. Igloo, 2017



65.20

URBAN STRATEGIES AND POLICIES

Code **65.30**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course seeks to achieve a comprehensive approach that allows the development of sustainable urban, economic, social, political and spatial urban policies and strategies, general understanding of political theories and possible applications in the context of urban development, the ability to place major development initiatives in different development cultures and socio-economic agendas, understanding the role of public and private actors in formal and informal urban development processes, prospects for substantiating decisions in strategic phases, pre-design for urban development initiatives and the ability to relate urban policies with spatial results at different scales.

Responsible:

Teach. Assist. PhD Arch. Mihai Racu

e-mail: mihai.racu.arh@gmail.com

Lecture / project contents

- C1 Introduction. Motivation, history, concepts, definitions.
- C2 Urban strategies and policies in Romania:
- C3 Urban strategies and policies in Romania:
- C4 Fundamental planning decisions:
- C5 Comprehensive planning - top-down and bottom-up approach to urban planning; Communities -Developing the Social Capital Index.
- C6 Collaborative planning; Citizens' participation; Public consultations.
- C7 Utilitarianism, Equitable Planning, Egalitarianism, New Realism, Incrementalism
- C8 Strategic Planning - Copenhagen, London, New York; Sustainability.
- C10 Principles of the urban economy. Economic impact of patrimony and urban planning decisions.
- C11 Fundamental planning decisions. Analysis methods.
- C12 Case studies.
- C13 Presentation of essays and open discussions.
- C14 Case studies. Recapitulation.

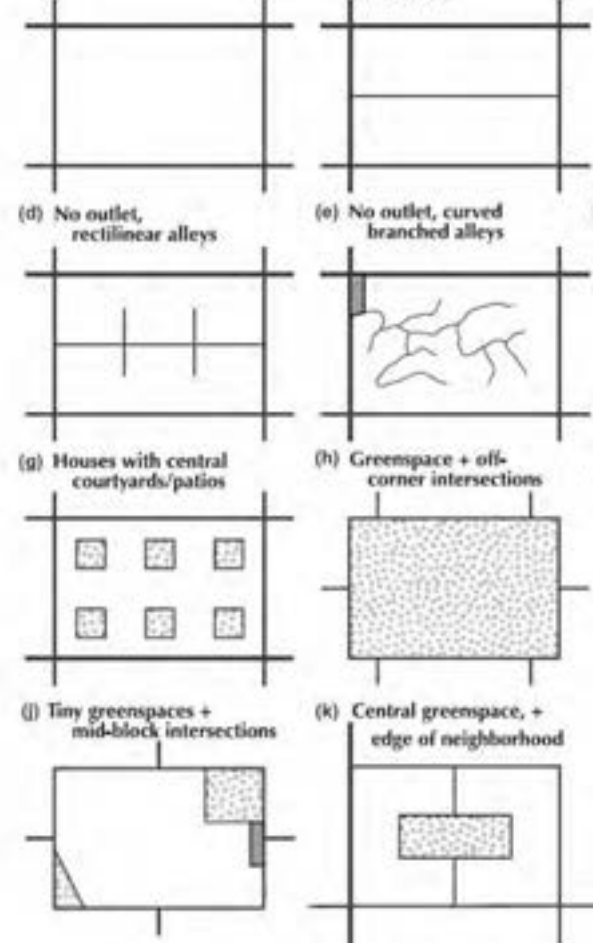
Seminar contents

-

Evaluation

Minimum examination grade 5 and an essay of 5000 words (analytical ability, personal interpretation, originality, creativity)

Written exam + essay



Selected bibliography

- *Strategia de dezvoltare teritoriala a Romaniei* (sursa: <http://www.mdrap.ro/dezvoltare-teritoriala/-2979>)
- *Zona Metropolitana Urbana si Strategii de Dezvoltare a Zonei Metropolitane Cluj-Napoca* (sursa: <http://www.cjc-luj.ro/zona-metropolitana-urbana/>)
- *Strategia de dezvoltare a municipiului Cluj-Napoca* (sursa: <http://cmpg.ro/wp-content/uploads/2015/05/strategie-cluj-napoca-2014-2020.pdf>)
- FAIRSTEIN, SUSAN S. (1999). *Can we make Cities we want? In The Urban Moment*, ed. Sophie Body-Gendrot and Robert Beauregard. Thousand Oaks: Sage.
- KYMLICKA, Will. (2002). *Contemporary Political Philosophy: An Introduction. 2nd ed.* OUP Oxford.
- B. R. and R. PHILIPP (2011) *Living in the Urban Age. in Ricky Burdett and Deyan Sudjic (eds.). Living in the Endless City. The Urban Age Project* by the London School of Economics and Deutsche Bank's Alfred Herrhausen Society. London. Phaidon Press.

65.30

ARTS AND ARCHITECTURE

Code **66.10**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course proposes to familiarize with contemporary and contemporary art concepts and personalities selected from the perspective of a significant relationship to the problems of architecture. Without a strictly chronological thread, the course highlights the confluences, both spatially and materially, and conceptually, of the current themes of architectural creation and modern and contemporary artistic creation. The aim is to stimulate the formation of a critical view that will allow the future architect to participate in an informed, responsible and relevant way in the contemporary public sphere, including by collaborating with artists. The case studies discussed highlight the location of architecture in the cultural complex of the present, aiming at sensitizing the students to the other forms of ar-

Responsible:
Assoc. Prof. PhD Arch. Cristina Purcar

e-mail: cristina.purcar@arch.utcluj.ro

Lecture / project contents

- C1 The painters of the city: a short history of modern painting
- C2 The city of the artists
- C3 Object and space. Object and place
- C4 Beyond the object. Art and ecology
- C5 Action, activism, participation: Dada&Surrealist practices
- C6 "Critical Spatial Practices"
- C7 Photography and architecture
- C8 Ar[t]hitecture on paper: architectural graphics and utopia
- C9 Virtual reality in contemporary art: augmented reality, smells-capes, soundscapes
- C10 Memory and public space: contemporary memorials
- C11 Home: contemporary artistic exploration of domesticity
- C12 Workshop, gallery, museum: curatorial practices and institutional critique
- C13 Artist-architect collaborations
- C14 Colloquium

Seminar contents

-

Evaluation

Evaluation along the way through various methods: short test, case study presentation, dialogue; Colloquium in the last week of the semester: choice between the written test and the presentation of a case study.

Selected bibliography

FOSTER H., KRAUSS R., BOIS Y.-A., BUCHLOH B.H.D. *Art since 1900. Modernism. Antimodernism. Postmodernism*, Londra: Thames&Hudson, 2007.
FERNIE J. *Two Minds: Artists and Architects in Collaboration*, Michigan: Black Dog, 2006.
GOMPERTZ W. *O istorie a artei moderne*, București: Polirom, 2014.
RACZ I. *Art and the Home: Comfort, Alienation and the Everyday*, I.B.Tauris, 2015.
RENDELL J. *Art and architecture. A place between*, I.B.Tauris, 2006.
WALLACE I.L. și WENDL N. (eds.). *Contemporary Art About Architecture: A Strange Utility*, Ashgate Publishing, Ltd., 2013.
WALTHER I.F.(ed.). *Art of the 20th Century. Painting. Sculpture. New Media. Photography*, Taschen, 2005.



PSYCHOLOGY OF FORM

Code **66.20**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The lecture intends working on a relative and volatile consensus about the psyche in general and the human in particular. It develops a series of reflexive considerations of collaboration of human intention with a context considered in its intention (nature), of the continuous repositioning of the human subject in relation to the fragility and transformativity of its objectualization. The didactic collaboration circumscribed to the course aims at a nuance of the excessive steep decision of overly technical formal taxation due to the abundance of the computer / computer projection and the revelation of some constants that, have the potential to help configure a place by proposing architectural identity.

Responsible:

Lect PhD Art. Leonard Vartic

e-mail: leonardvartic@yahoo.co.uk

Lecture / project contents

- C1 Form, formalization; forms: content and periphery / core and contour
- C2 Psychic, uniqueness or dispersion
- C3 Matter, substance, principle, condition, phenomenon
- C4 Dynamics, increases / decreases, dilatations / contractions, scatter / coagulation
- C5 Color and shape / shape and (in) light; mental psychological "mimetic realism" or imitative psyche
- C6 Space: volume , shape, substance, geometry
- C7 Form time, psi. evolutionary / psi. involutive
- C8 Psycho-formal travel-psychological geography
- C9 Useful and useless / pragmatic and utopian
- C10 Psycho-formal / automatism technologies, experiences, norms, laws, rules, standards
- C11 Word and form / words and mockings
- C12 Beautiful - ugly, good - bad, allowed - prohibited, psycho - formal duplications
- C13 Drawing between precision and ephemerality
- C14 OM, ephemerism and (or) perennality, form and (or) life (party)

Seminar contents

-

Evaluation

Elaborated work during the semestre - cooperation assumed with the evidence of a specific formal-identifying management and the immanence of its inhibited reactivation in relation to the prescription of a marginality.

Selected bibliography

- ANTOINE DE SAINT EXUPERY, (2011) *Micul Print*, Ed. Rao Bucuresti
- C. N. SHULZ, (1979) *Genius Loci: Towards a Phenomenology of Architecture*, Ed. Rizzoli New York
- G. M. CANTACUZINO, (1977) *Izvoare si popasuri*, Ed. Eminescu Bucuresti
- G. BACHELARD, (2003) *Poetica spatiului*, Ed. Paralela 45
- J. KRISHNAMURTI, *Eliberarea de cunoscut*, Ed. Herald Bucuresti
- J. KRISHNAMURTI, *Unica Revolutie*, Ed. Herald Bucuresti
- P. BLAKE, (1979) *God`s own junkyard*, Ed. Holt, Rinehard and Winston New York



66.20

CULTURAL ANTHROPOLOGY

Code **66.30**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course of Cultural Anthropology has as its main direction the development of culture and everything it represents. It wants to deepen the knowledge about some areas related to architecture as well as the revelation of the interrelationship between them and a possible innovative architectural expression based on a valid symbolic language. The lectures present lifestyles different than ours, specific to other cultures and their treatment by comparison, highlighting the idea that these lifestyles determine highly different paths for architectural design.

Responsible:

Assoc. Prof. PhD Arch. Paul Mutica

e-mail: paulmutica@yahoo.com

Lecture / project contents

- C1 Introductory notions - definition, fields of anthropology examples. Methods and techniques of research
- C2 Beginnings of cultural anthropology. Culture - Concept and Problem
- C3 Art Anthropology - visual representations, and their symbolism. Linguistic Anthropology - Language and Culture.
- C4 Magic. Anthropology of myths and religions.
- C5 Psychology, sociobiology
- C6 Categories of society: family, kinship, politics and economics. Issues of race and ethnicity
- C7 Man and his needs as a principle of the architectural approach
- C8 Rhythm and measure in architecture
- C9 Anthropology of space and anthropology of living
- C10 Vernacular architecture. Rural model and urban model to live
- C11 The city for people. garden from anthropological perspective
- C12 Problems and directions in contemporary architecture
- C13 Student support for the papers and their evaluation

Seminar contents

-

Evaluation

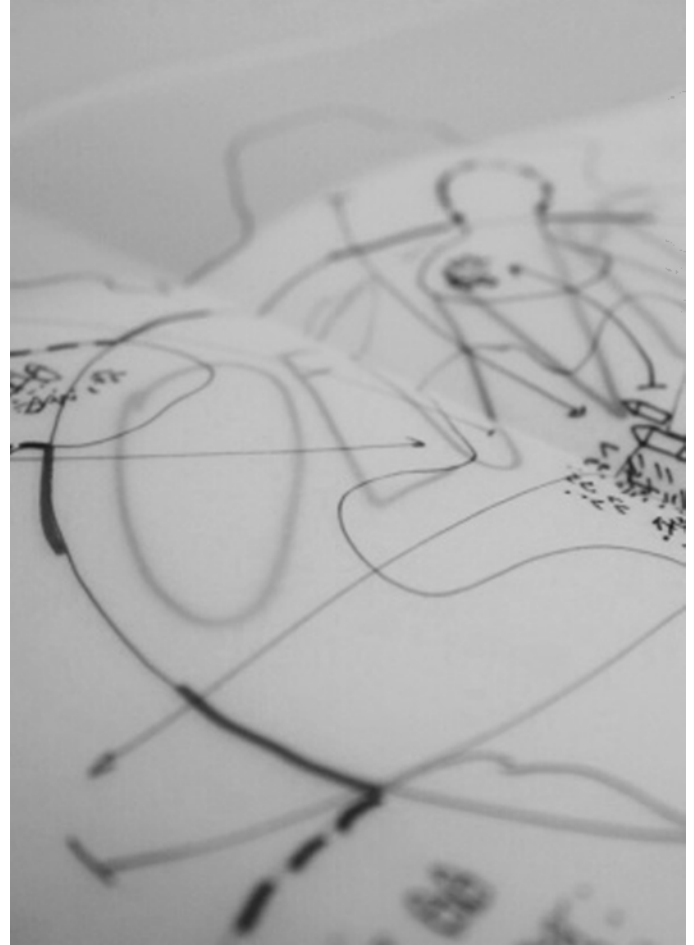
Grid type test, 9 questions of 1p, plus 1p ex officio with the possibility of relieving by presenting a report to colleagues.

Selected bibliography

- A. MIHU, *Antropologie culturală*, 2001, Ed. Dacia, Cluj-Napoca
- P. MUTICĂ, *Antropologie culturală*, 2013, UT Press, Cluj-Napoca
- M. COMAN, *Introducere în antropologia culturală. Mitul și ritul*, 2008, Ed. Polirom, Iași
- HALL, EDWARD T., *The Hidden Dimension, (1969)1990*, Anchor Books, New York
- LEACH, EDMUND, *Social Anthropology, 1982*, William Collins Sons and Co. Ltd, Glasgow
- C. LEVI-STRAUSS, *Antropologia structurală*, 1978, Ed. politică, București
- V. MIHĂILESCU, *Antropologie. Cinci introduceri*, 2009, Ed. Polirom, Iași
- V. MIHĂILESCU (coord.), *Etnografii urbane. Cotidianul văzut de aproape*, 2009, Ed. Polirom, Iași
- G. TROC, *Postmodernismul în antropologia culturală*, 2006, Ed. Polirom, Iași

Internet resources:

<https://www.ted.com/talks>



66.30

MANAGEMENT AND URBAN LEGISLATION

Code **67.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

Students acquire legislation knowledge specific to the field of architecture and urban planning. The course is aimed at the acquisition of notions on the understanding, the interpretation and the application of law, regulations, guidelines or norms in projects, as well as at the assimilation of urban management concepts.

Responsible:

Prof. PhD Arch. Adrian Iancu

e-mail: arhimobil@gmail.com

Lecture / project contents

- C1 Introduction. Purpose of the course. - presentation of the idea and the intended path. Key elements addressed during case studies.
- C2 Legislation in the field of building authorization I
- C3 Legislation in the field of building authorization II
- C4 Legislation in the field of building authorization III
- C5 Legislation in the field of architecture I
- C6 Legislation in the field of architecture II
- C7 Legislation in the field of architecture II
- C8 Legislation in urban planning I
- C9 Legislation in urban planning II
- C10 Legislation in urban planning II
- C11 Urban management I
- C12 Urban management II
- C13 Urban management II
- C14 Review / Relief Test

Seminar contents

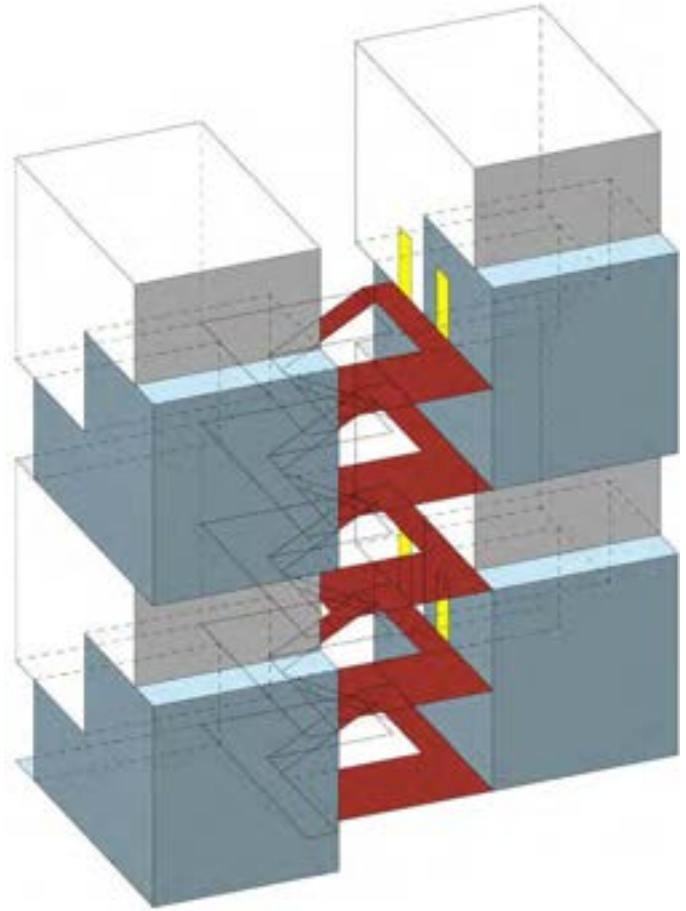
-

Evaluation

Written exam (test) - Possibility of assessment during the semester.

Selected bibliography

- Regulamente urbane / Iancu, Adrian, UTPRESS, Cluj-Napoca, 2012
- Urbanism in Cluj-Napoca / Iancu, Adrian, UTPRESS, Cluj-Napoca, 2012
- Codul Civil.
- Legea nr. 350/2001 privind amenajarea teritoriului și urbanismul, publicată în Monitorul Oficial al României, Partea I, nr. 373 din 10 iulie 2001, cu modificările ulterioare.
- Legea nr.50/1991 privind autorizarea executării lucrărilor de construcții, republicată în Monitorul Oficial al României, -Partea I, nr. 933 din 13 octombrie 2004, cu modificările ulterioare.
- Legea nr. 18/1991 privind fondul funciar, republicată în Monitorul Oficial al României, Partea I, nr. 1 din 5 ianuarie 1998, cu modificările și completările ulterioare.
- Legea nr. 215/2001 - Legea administrației publice locale, publicată în Monitorul Oficial al României, Partea I, nr. 204 din 23 aprilie 2001, cu modificările și completările ulterioare.



67.00

ARCHITECTURAL COMPOSITION

Code **68.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course aims to provide the skills to address a problem of architectural theory from a critical and polemical perspective, to give the ability to formulate original points of view in relation to consecrated themes; the ability to interrogate them, to give the ability to grasp the importance of different cultural phenomena in the process of architectural creation and to develop the capacity to critically evaluate a speech / an architectural work.

Responsible:

Lect. PhD Arch.

Smaranda Maria Todoran

e-mail:

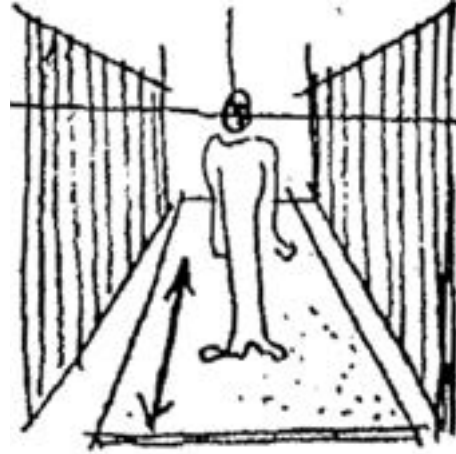
arh.smaranda.todoran@gmail.com

Lecture / project contents

- C1 Introductory course. Composition - between set of rules and artistic and architectural discours
- C2 Modernity and post-modernity. Contemporary context. The themes of contemporary discourse
- C3 The theme of memory in architecture. Text studies
- C4 The theme of memory in architecture in interviews and exhibitions
- C5 The theme of memory in architecture. Examples of projects - case studies
- C6 The theme of memory in architecture. Examples of projects - case studies. Interpretations
- C7 The theme of nature and ecology. Studies of texts and exhibitions
- C8 The theme of nature and ecology. Case Study
- C9 Utopia. Text studies
- C10 Contemporary Discourse: Phenomenology
- C11 Contemporary Discourse: Autonomy of Architecture
- C12 Modes of Communication in Contemporary Architecture
- C13 Recapitulative course
- C14 Discussions. Tests

Seminar contents

-

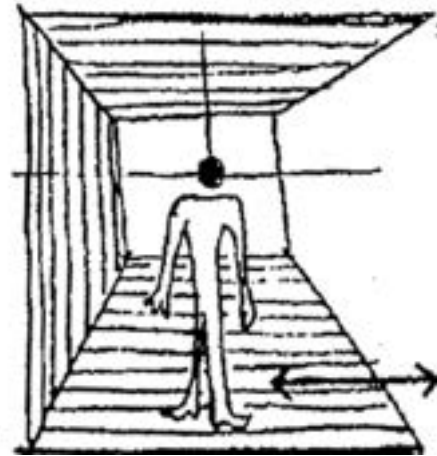


Evaluation

Written test: ability to analyze a given text; the ability to write a synthesis text

- based on the information received at the course.

Evaluation methods: 60-minute exam.



Selected bibliography

-Courses 3-6: Aloïs Riegl, 'The Modern Cult of Monuments: Its Character and Its Origin,' trad. Kurt W. FORSTER și D. GHIRARDO, în *Oppositions*, n. 25 (Fall 1982), pp. 21-51 (extrase traduse).

-J. BAUDRILLARD, *Le système des objets*, Paris: Gallimard, 1968 (extrase traduse).

- *Convenția privind protecția patrimoniului mondial, cultural și natural, adoptată de Conferința generală a Organizației Națiunilor Unite pentru Educație, Știință și Cultură la 16 noiembrie 1972.*

- P. RICOEUR, *La mémoire, l'histoire, l'oubli*, Paris: Ed. du Seuil, 2000. Rem Koolhaas, Cronocaos, August 2010 – catalog de expoziție.

-Courses 7-8: G. CLÉMENT „Le tiers passage”. In: Gilles Clément. Textes en copyleft. [Online]. 2004 [Consultat în 5 aprilie 2011] Disponibil: <http://www.gillesClément.com/cat-copylefttextes-tit-Textes-en-copyleft>.

- J. BAUDRILLARD, J. NOUVEL, *Obiecte singulare*, București: Paideia, 2005.

-B. TSCHUMI, „The Pleasure of Architecture”. ed. New York, NY: Princeton Architectural Press, 1996.

68.00

LANDSCAPE ARCHITECTURE

Code **69.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course aims to integrate the awareness of the importance for man of maintaining the relationship with nature and presence of the areas planted in human settlements. It studies the various aspects of the arrangement of the parks and gardens, in order to raise the awareness of the relationship between the human habitat and the climate, to provide knowledge of representative examples of gardens and parks, international and national, both historical and contemporary, as well as knowledge of component elements and compositional principles of landscaping and to present the peculiarities of representing landscape design.

Responsible:

Assoc. Prof. PhD Arch. Andreea Milea

e-mail: Andreea.Milea@arch.utcluj.ro

Lecture / project contents

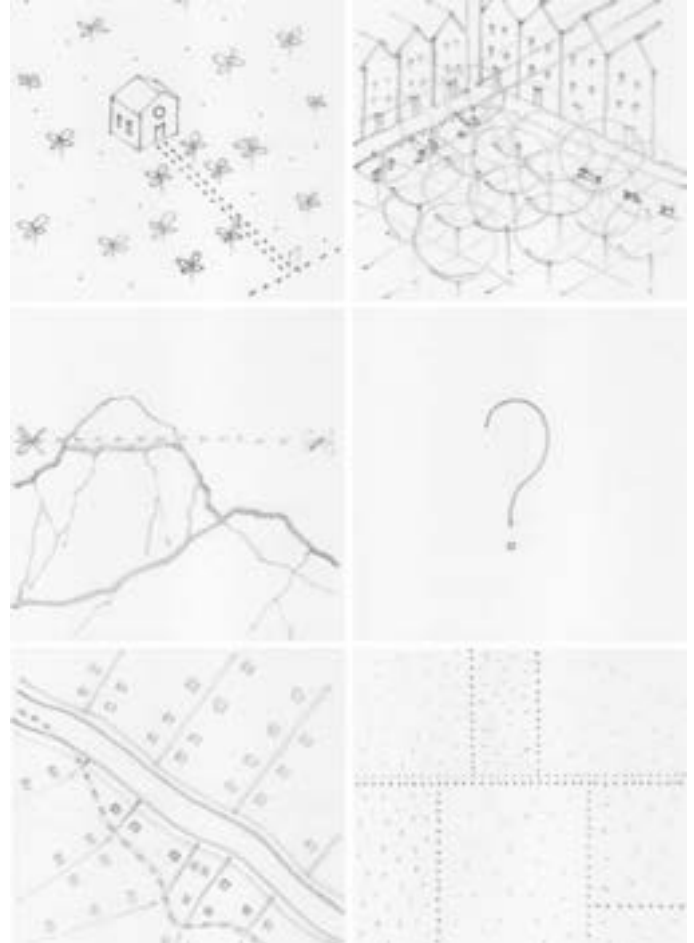
- C1 Getting Started. Human habitat and climate
- C2 Historical styles of landscaping gardens and parks: Part I
- C3 Historical styles of landscaping gardens and parks: Part II
- C4 The appearance of the public park and the definition of green urban space
- C5 Green spaces: roles, assignment, types, sizing and organization
- C6 Components and principles of composition of landscaping: Part I
- C7 Components and principles of composition of landscaping: Part I
- C8 Land
- C9 Water
- C10 Vegetation: Part I
- C11 Vegetation: Part II
- C12 Circulation
- C13 Utility and decorative constructions
- C14 Representation of landscape design

Seminar contents

-

Evaluation

Each student opts for the evaluation method / methods that will apply to him / her.



Selected bibliography

AMIDON, Jane: Moving Horizons, The Landscape Architecture of Kathryn Gustafson and Partners (Birkhäuser – Publishers for Architecture, Basel, 2005).

GIROT, Christophe, The Course of Landscape Architecture. A History of our Designs on the Natural World, from Prehistory to the Present (Thames & Hudson Ltd, London, 2016).

ILIESCU, Ana-Felicia: Arhitectură peisageră (Editura Ceres, București, 2003).

LAE: Landscape Architecture Europe: Fieldwork (Birkhäuser – Publishers for Architecture, Basel, 2006).

LAE: Landscape Architecture Europe: On Site (Birkhäuser – Publishers for Architecture, Basel, Boston, Berlin, 2009)

RICHARDSON, Tim (ed.): The Garden Book (Phaidon Press, London, New York, 2003).

SIMONDS, John Ormsbee, STARKE, Barry W.: Landscape Architecture, A Manual of Environmental Planning and Design (McGraw-Hill, New York, Chicago, San Francisco, Lisbon, Madrid, Mexico City, Milan, New Delhi, San Juan, Seoul, Singapore, Sydney, Toronto, 2006).

69.00

NEW TECHNOLOGIES IN ARCHITECTURE

Code **70.00**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The main goal is to understand and form a minimal baggage of technical knowledge about the latest trends in contemporary architecture. Also, the course aims to understanding the sustainable dimension in the architecture of the last decades, to accumulate through case studies innovative constructive examples of state-of-the-art technologies and to create the premises for research and future trends in the field.

Responsible:

Assoc. Prof. PhD Arch. Paul Mutica

e-mail: paulmutica@yahoo.com

Lecture / project contents

- C1 Introduction. The Importance of New Technologies
- C2 Principles of sustainability, sustainability and flexibility of contemporary architecture
- C3 Reinterpretations of vernacular architecture through recent technologies
- C4 Special technologies - vertical structures. Skyscrapers
- C5 Special technologies - structures with extreme openings
- C6 Special technologies - megastructures. Artificial islands, subjugation and use of forces of nature
- C7 Special Technologies - Smart House. BMS. From smart building to smart city
- C8 Old materials, new technologies I
- C9 Old materials, new technologies II
- C10 Special materials
Case studies I
- C11 Case studies II
- C12 Starhitec and development of new design technologies
- C13 Architects and development of new construction technologies
- C14 The Future of Technology in Architecture and Construction

Seminar contents

-



Evaluation

The test has 9 grid and 1p questions from the office. Also, students can present to colleagues a technology principle and case studies for a maximum of 2p in the final grade.

Selected bibliography

Addington, Michelle; Shodek, Daniel, Smart Materials and New Technologies for Architecture and Design Professions, 2005, Oxford: Architectural Press.

Bauer, Michael; Möslle, Peter; Schwartz, Michael, Green Building - Guidebook for Sustainable Architecture, 2010, London: Springer.

Hebel, Dirk E.; Wisniewska, Marta H.; Heisel, Felix, Building From Waste. Recovered Materials in Architecture and Construction. 2014, Basel: Birkhauser.

Lally, Sean (ed.), Energies. New Material Boundaries, 2009, Architectural Design vol. 79, no. 3.

Leidecker, Sylvia, Nanomaterials in Architecture, Interior Architecture and Design, 2008, Basel: Birkhauser.

Ritter, Alex, Smart Materials in Architecture, Interior Architecture & Design, 2007, Basel: Birkhauser.

Sassi, Paola, Strategies for Sustainable Architecture, 2006, New York: Taylor & Francis Inc. SB05, Sustainable Building Design Book, 2005, Tokyo.

70.00

SPECIALISED DESIGN STUDIO - URBAN PLANNING 3

Code **71.00**
Semester **1**
Credits **4**
No. of hours/ lecture -
No. of hours/ seminar -
No. of hours project **3 / week**
Discipline type **Compulsory**
Examination form **Project**

Objectives

Specialized urban planning is a compulsory exercise for understanding the interdependence between buildings - architectural objects and the surrounding environment, the urban context (construction, landscape, society) and for the social and cultural impact of the created ensemble.

Project in 3 phases: Designing a representative urban space in Cluj Napoca:

Phase 1 - Analysis of the existing situation and presentation of two options. Sc.1: 2000

Phase 2 - Variants of urban planning

Phase 3 - The project itself. Urban planning. Sc.1 :1000

Responsible:
Assoc. Prof. PhD Arch.
Vlad Sebastian Rusu

e-mail: vlad.rusu@arch.utcluj.ro

Teaching team
Assoc.Prof. PhD Arch. Octav Olănescu
Lect. PhD Arch. Dragoș Dascălu
T. Assist. PhD Arch. Mihai Racu
T.Assist. PhD Arch. Daniel Șerban
Arch. Florin Dascălu
Arch. Benjamin Kohl
Arch. Nicolae Milășan

Lecture / project contents

-

Seminar contents

- S1 Urban Renovation. Collective work. Duration
- S2 Intermediate corrections on students' sketches. Correction to the panel. Interim recording
- S3 Phase 2 - Variants of urban planning - two proposals
Intermediate corrections of sketches made by the student. General panel correction. Interim recording. Identifying completions needed for final project delivery
- S4 Phase 3 - The project itself

Evaluation

Phases have different weights.

Phase 1 - 3 points, Phase 2 - 2 points, Phase 3 - 5 points. Each stage is scored from 1 to 9, 1 point is granted ex officio; the notes F1, F2, F3 result.

Selected bibliography

- Laurian R., Probleme de estetica oraselor, Ed. Tehnica Bucuresti, 1962.
Curinschi G., Centrele istorice ale oraselor, Ed. Tehnica Bucuresti, 1967.
Lazarescu C. (sub conducerea), Urbanismul în Romania, Ed. Tehnica Bucuresti, 1977.
Enache M., Urbanismul britanic contemporan, Ed. Tehnica Bucuresti, 1979.
Mangin D., Panerai Ph. Projet urbain, Ed. Parenthesès, Marseilles, 1999.
Ghid privind metodologia de elaborare si conținutul cadru al planului urbanistic zonal, MLPAT, Bucuresti, 2000.
Legislație privind urbanismul, Matrix Rom, Bucuresti 2005.
Machedon Florin, Metode de analiza morfologica a tesuturilor urbane, Ed. Univ. „Ion Mincu” Bucuresti, 2006.
Choay Francoise, Pentru o antropologie a spatiului, revista Urbanismul, Bucuresti, 2011.



71.00

DESIGN SYNTHESIS STUDIO 3

Code **72.00**

Semester **1**

Credits **14**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **12 / week**

Discipline type **Compulsory**

Examination form **Project**

Objectives

The course aims at developing students' competencies in the field of architectural design by applying the design methodology to the themes of plurivalent programs and the elaboration of a complex architectural project, as the final stage of an interdisciplinary process, started with the urbanism project. Detailing the architectural object by creating a project concept, establishing neighborhood relations with a proposed urban context, functional, structural and spatial solution according to the design theme and the norms in force.

Responsible:

Assoc. Prof. PhD Arch.

Vlad Sebastian Rusu

e-mail: vlad.rusu@arch.utcluj.ro

Lecture / project contents

-

Teaching team

Assoc. Prof. PhD Arch. Gheorghe Vais

Lect. PhD Arch. Dragoş Dascălu

T. Assist. PhD Arch. Mihai Racu

T.Assist. PhD Arch. Szende Szentesi-Nejur

T.Assist. PhD Arch. Daniel Şerban

Arch. Florin Dascălu

Arch. Benjamin Kohl

Arch. Nicolae Milăşan

Seminar contents

Exposition, applications, individual and collective crits, projects evaluation with public support.

Evaluation

Architectural Project : According to the design theme and the Regulation for Discipline Synthesis Design for Year V. Project Support Assessment.



Selected bibliography

Ernst Neufert, Manualul arhitectului - elemente de proiectare și de construcție, Alutus S.A., Miercurea Ciuc, 2004.
David Littlefield, Metric Handbook- Planning and Design Data, 3rd Edition, Elsevier, Oxford, 2008.
Gheorghe Vais, Programe de arhitectură, UT Press, Cluj-Napoca, 2008.
Adrian Iancu, Teodora Balan, Andrei Nejur, Vlad Rusu, Szende Szentesi, Smaranda Todoran, Calin Spanu, Povestea unui proiect, UT Press, Cluj-Napoca, 2012.
Reviste de arhitectură existente în Biblioteca facultății: El Croquis, The Architectural Review, Detail ș.a.
Surse internet: Archdaily.com, Architizer.com, Divisare.com ș.a.

72.00

05_{year}
2nd semester

URBAN MOBILITY

Code **73.10**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course aims at identifying and understanding the challenges of the architect - urbanist profession in the issues of urban mobility. It raises awareness of the importance of urban mobility within the contemporary city and fosters an understanding of the conditioning between mobility and urban development, students gaining knowledge of the general notions of sustainable urban mobility, built on the principles of integration, participation and continuous evaluation, in order to meet people needs in terms of increasing the quality of life in cities and surroundings; students also acquire notions of classifying and arranging urban traffic within the contemporary city.

Responsible:
Assoc. Prof. PhD Arch.
Vlad Sebastian Rusu

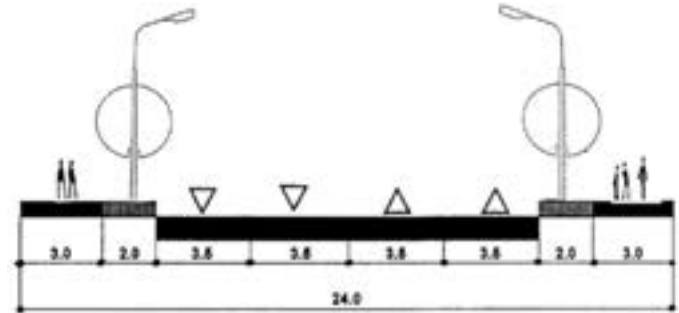
e-mail: vlad.rusu@arch.utcluj.ro

Lecture / project contents

- C1 Mobility and the challenges of urban space
- C2 Effective management principles of transport and urban mobility. Integrated transport strategies
- C3 Interurban traffic. The Roadway. Railway
- C4 Urban traffic. Urban traffic. Urban traffic network
- C5 Urban transport systems. Public transport. Classifications
- C6 Street, space for coexistence of different types of mobility
- C7 Restructuring urban spaces reserved for urban traffic
- C8 Intersections and markets. General notions
- C9 Organization of movement. Special-purpose traffic squares
- C10 Square structure
- C11 Urban planning of streets. Ways of approaching urban street space based on the speed of travel
- C12 Urban planning of squares, in line with sustainable urban mobility principles
- C13 Places of quality, level of detail
- C14 Walls and sitting arrangements in accordance with sustainable urban mobility principles

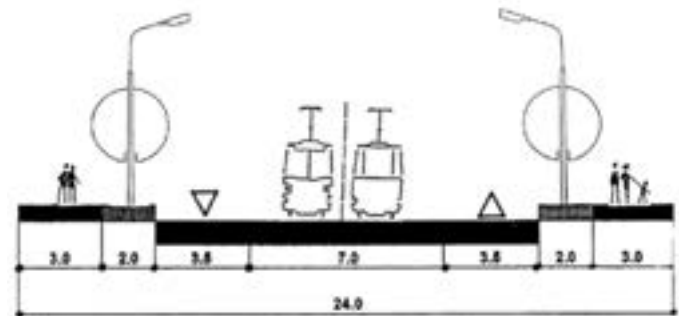
Seminar contents

-



Evaluation

Verification of knowledge gained through synthesis topics.



Selected bibliography

- J. GEHL - *Orașe pentru oameni*, Editura Igloomed, București 2012.
- Primăria Londrei - *Transport for London. Central London. Congestion Charging. Impacts Monitoring. Sixth Annual Report. Transport for London & Central London Partnership*, 2008.
- Primăria Copenhaga. *Copenhagen City of Cyclists - Bicycle account 2008*, Copenhaga: Primăria Copenhaga, 2009.
- GEHL Architects - *Towards a Fine City for People - Public Spaces - Public Life* - London 2004.
- London: Transport for London & Central London Partnership, 2004.
- R. LAURIAN - *Urbanismul*, Editura Tehnică, București, 1965.
- C. LĂZĂRESCU - *Urbanismul în România* - Editura Tehnică, București, 1974.
- Mobilitate urbană, Observatorul Urban București*, Buletin U.A.R., nr. 19/2014, București, 2014.

URBAN REGULATIONS

Code **73.20**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course aims for the students to acquire notions of urban regulations, to learn outcomes of understanding, interpreting and applying urban regulations for future architects and to integrate notions on the implementation and / or drafting of urban regulations for future urban planners.

Responsible:

Prof. PhD Arch. Adrian Iancu

e-mail: arhimobil@gmail.com

Lecture / project contents

- C1 Introduction. Purpose of the course. Key elements addressed through case studies
- C2 General Urbanism Regulation (RGU) in conjunction with other legislative acts
- C3 Annexes to the General Town Planning Regulation
- C4 Percentage of land occupancy
- C5 Coefficient of land use
- C6 How to draw up Local Urban Planning Regulations
- C7 Main elements addressed in the drafting of the Regulations related to the general urban planning plans of the localities
- C8 Updating Urban Regulations. Case study for Cluj-Napoca
- C9 Urban Specific Regulations. Examples. Problems and applications
- C10 Implementation of Urban Regulations in Urban Planning
- C11 Involvement of key actors in relation to Urban Regulations
- C12 Urban regulations as tools for the management and self-regulation of urban processes
- C13 The way of interaction of the local or county administration
- C14 Case study for the elaboration of the Regulation for a Territorial Reference Unit

Seminar contents

-

Evaluation

Colloquium - written - Possibility to relieve works during the semester.

Selected bibliography

- A. IANCU, *Regulamente urbane*, UTPRESS, Cluj-Napoca, 2012.
- A. IANCU, *Urbansim in Cluj-Napoca*, UTPRESS, Cluj-Napoca, 2012.



73.20

AESTHETICS IN ARCHITECTURE

Code **74.10**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The main purpose of the lecture is to understand and develop a value system that can underpin esthetic value judgments of an object of architecture or art. The course is meant to determine the differences between stylistic and beautiful ideals of architecture and the object that transcends the limits of its times, it focuses on the aesthetics of architecture but emphasizing common traits between the interpretation of architecture and other arts and it formulates common language elements with other arts.

Responsible:

Assoc. Prof. PhD Arch. Paul Mutica

e-mail: paulmutica@yahoo.com

Lecture / project contents

- C1. Introduction and history
- C2. Architecture philosophy and human needs
- C3. Psychology of architecture and creativity
- C4. Harmony and the theory of chaos
- C5. Numerology of beauty
- C6. Case studies. From nature to urban tissue
- C7. Attitudes and directions
- C8. Compositional rules. Proportion and rhythm
- C9. Architectural metamorphoses
- C10. Beautiful and sublime. The limbic domain
- C11. The patrimony problem
- C12. Architecture as an anesthetic
- C13. The Problem of Architecture and Contemporary Art

Seminar contents

-



Evaluation

Written test which will have 9 grid and 1p questions from the office. The possibility of increasing the grade through the activity of the course. - Written test

Selected bibliography

- M. MOLDOVAN, *Estetică*, 1993, Ed. Univ. Tehnice Cluj-Napoca, Biblioteca Centrală.
- ALDERSEY-WILLIAMS, H., *Zoomorphic: New Animal Architecture*, 2003, London: Laurence King Publ.
- R. ARNHEIM, *Artă și percepție vizuală - o psihologie a văzului creator*. Trad. Florin Ionescu, 1979, București, Ed. Meridiane.
- A. DE BOTTON, *Arhitectura fericirii*, 2009, București, Ed. Vellant.
- A. CARLSON, *Aesthetics and the Environment: The Appreciation of Nature, Art and Architecture*, 2000, London: Routledge.
- R. LAURIAN, *Probleme de estetica orașelor*, 1962, București, Ed. Tehnică.
- N. LEACH, *Anestetica. Arhitectura ca anestezic*, 1999, București, Ed. Paideia.
- MALLGRAVE, Harry Francis, *The Architect's Brain: Neuroscience, Creativity and Architecture*, 2010, Wiley Blackwell.
- Michelis, P.A., *Estetica arhitecturii*, 1983, București, Ed. Meridiane.

74.10

HISTORICAL BUILDING TYPES

Code **74.20**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course aims providing knowledge of the Transylvanian architectural heritage built during the period 1867-1918, to offer notions of the time-specific planimetric composition systems, to explain functional schemes as reflections of institutional organization and to develop knowledge of the architectural language specific to Eclecticism and Secessionism in Transylvania, related to European models.

Responsible:

Assoc. Prof. PhD Arch. Gheorghe Vais

e-mail: gheorghe.vais@arch.utcluj.ro

Lecture / project contents

- C1 Modernization of historical Transylvania and new architectural programs
- C2 Buildings for local government: prefectures and townhalls
Administrative buildings: courthouse, financial headquarters
- C3 Finance buildings: banks, insurance companies
- C4 Buildings for secondary education: state and confessional
- C5 gymnasiums and high-schools
Curricula for university education
- C6 Health buildings: comitaten hospitals and national hospitals
- C7 Library buildings (Library of Transylvania University and Museum in Cluj)
- C8 Buildings for social entertainment: theaters; Cluj theaters
- C9 Museum buildings
- C10 Tourism buildings: hotels and spa facilities
- C11 Landscape Architecture (Central Park of Cluj)
- C12 Architects who worked in Transylvania during the studied period
- C13 Colloquium

Seminar contents

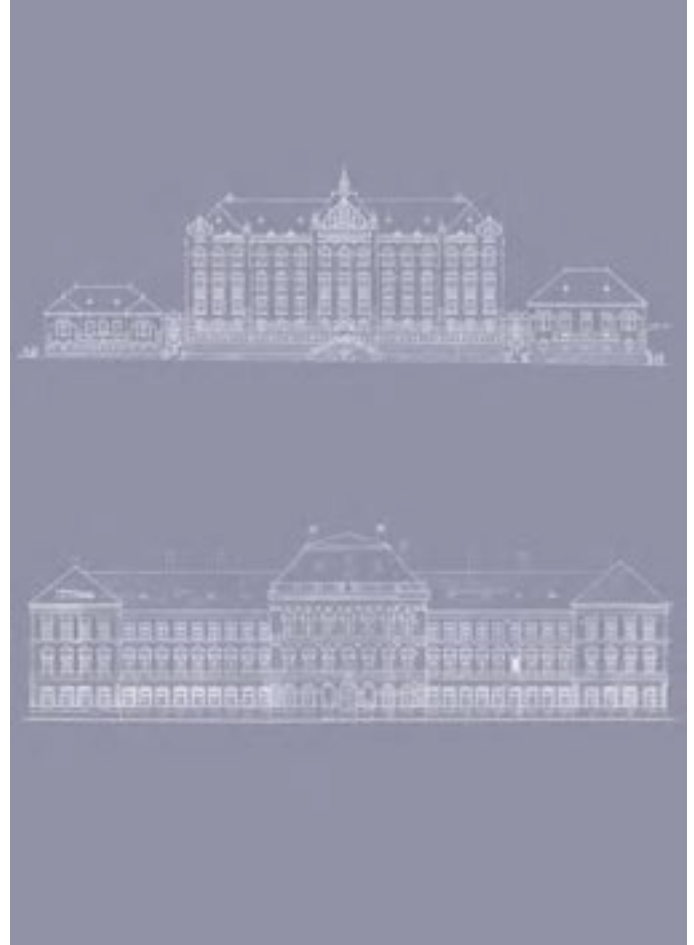
-

Evaluation

Final research work (15 pages) on a course topic.
Assessment of the work by specific criteria.

Selected bibliography

- AGACHI Ioana M., *Clujul modern-aspecte urbanistice*, UTPress, Cluj-Napoca, 2004.
- BENKÖ M., *Probleme urbanistice ale oraşului Cluj în prima jumătate al secolului XIX în Studii şi cercetări de istoria artei. seria arta plastică*, XIV, 1967, nr.2, pag.237-243.
- BISZTRAY G., SZÁBÓ T. Attila, TAMÁS Lajos, *Erdély Magyar Egyeteme. Az Erdély Egyetemi gondolat és a M. Kir. Ferenc József Tudományegyetem Története, Az Erdély Todományos Intézet Kiadása*, Kolozsvár, 1941.
- FLOREA F., *Facultatea de Medicină, şcoala medicală clujeană şi spitalele din Cluj (1500-2000)*, Casa Cărţii de Ştiinţă, Cluj-Napoca, 2004.
- GERLE J., KOVÁCS A., MAKOVECZ I., *A századforduló Magyar Építészete, Szépirodalmi Könyvkiadó*, Budapest, 1990.
- HOFFMANN Hans-Christoph, *Die Theaterbauten von Fellner und Helmer*, Prestel-Verlag, München, 1966.
- JANOVICS Jenő, *A Hunyadi téri színpáz, Korunk Baráti Társaság Komp-Press Kiadó*, Kolozsvár, 2001.
- VAIS Gh., *Clujul eclectic. Programe de arhitectură în perioada dualistă (1867-1918)*, UTPress, Cluj, 2009.



74.20

COMPARATIVE ARCHITECTURE

Code **74.30**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The main goal of this course is to explore and develop the professional horizon of the students, thus allowing them to enhance their abilities to understand the evolution of the architectural phenomenon through a comparative approach (identifying and comparing common motifs and features from different geographical, cultural and / or historical settings, always relating them to a specific origin, discussing their configuration, spatiality, structure, materials, décor / ornamentations, meaning, symbol, and image).

The course will discuss architecture (in general) – and the architectural object (in particular) – linking it to a set of values which surpasses its own social, cultural, political, economic and geographical context, emphasizing its values, meanings, the importance of architectural masterpieces or landmarks, placing them in a single, common framework of world culture.

Lecture / project contents

- C1 An Introduction to Comparative Architecture
- C2 The Origins of Architectural Comparatism
- C3 The Main Categories of Comparative Architecture (part 1)
- C4 The Main Categories of Comparative Architecture (part 2)
- C5 The Main Categories of Comparative Architecture (part 3)
- C6 The Main Categories of Comparative Architecture (part 4)
- C7 The Main Categories of Comparative Architecture (part 5)
- C8 The Main Categories of Comparative Architecture (part 6)
- C9 The Main Categories of Comparative Architecture (part 7)
- C10 The Methodology of the Comparative Approach in Architecture
- C11 Case Studies of the Comparative Approach in Architecture
- C12 The Comparative Approach as Means of Scientific Research
The Architectural Morphology of a Building
- C13 Architecture and Other Arts. Architecture in Literature
- C14 Comparative Architecture – a Conclusion

Responsible:

Assoc. Prof. PhD Habil. Arch.

Dan-Ionuț Julean

e-mail: ionut.julean@arch.utcluj.ro

Seminar contents

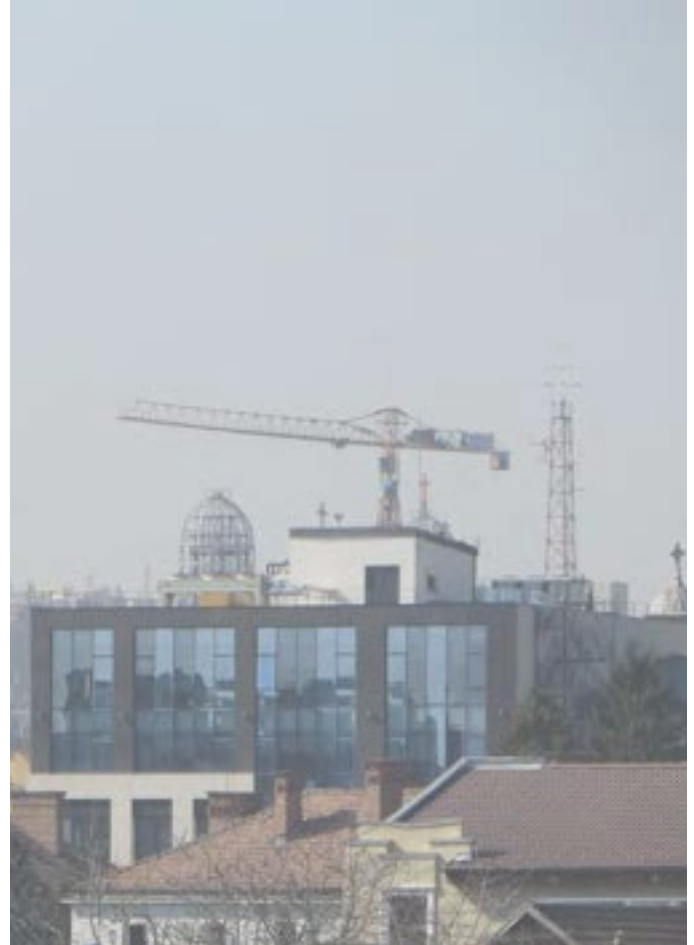
-

Evaluation

Written paper (academic argumentative essay) or an architectural model of a literary-architectural experiment, or cumulative argumentative opinions stated during class (minimum 8).

Selected bibliography

CURINSCHI VORONA, Gheorghe. *Introducere în arhitectura comparată*. București: Editura Tehnică, 1991.
FLETCHER, Banister, Sir. *A History of Architecture on the Comparative Method*. London: B.T. Batsford and New York: C. Scribner's Sons, 1896.



74.30

RESEARCH IN ARCHITECTURE

Code **75.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course aims developing the ability to plan, conduct and pre-sent research in the field of architecture. It discusses the methodology of scientific research, the methodology of architectural and urban planning research as well as research-ethics issues, through theoretical notions and concrete case-studies, engaging student participation.

Responsible:

Prof. PhD Habil. Arch. Dana Vais

e-mail: dana.vais@arch.utcluj.ro

Lecture / project contents

I. Architectural research theory

What is architectural research
Research methods in architecture
Research and project

II.The practice of research

How to write a research project; how to write a publishable work
Dissertation thesis in architecture
Ethics of research

III. Case Studies

Presentations of ongoing research

Seminar contents

-

Evaluation

Exam: research project exercise + ongoing participation. On-going formative assessment and evaluation possibility through student case study presentations in class.

Selected bibliography

- ARCHER B. "*The Nature of Reserch*", în: *Co-design, interdisciplinary journal of design*, January 1995, pp. 6-13.
- BORDEN I., RÜEDI RAY K. *The Dissertation. An Architecture Student Handbook*, Architectural Press, Oxford, 2006.
- ECO U. *Cum se face o teză de licență*, Ed. Polirom, Iași, 2006.
- GROAT L., WANG D. *Architectural Research Methods*, John Wiley and Sons, New York, 2002.
- HEYNEN H. "*Research in Architecture: a Contested Domain*", în: *European Association for Architectural Education Bulletin*, Special Issue 2006, pp. 47-54.
- LUCAS R. *Research Methods for Architecture*, Laurence King Publisher, London, 2016.
- VAIS D. *Cercetare în arhitectură*, UT Press, Cluj, 2015.
- VAIS D. *Etica cercetării în arhitectură*, UT Press, Cluj, 2018.



75.00

MARKETING AND COMMUNICATION IN ARCHITECTURE

Code **76.00**

Semester **2**

Credits **3**

No. of hours/ lecture **2 / week**

No. of hours/ seminar **2 / week**

No. of hours project **-**

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course aims developing performative communication in Romanian in a diverse range of professional situations. It addresses the theoretical approach to verbal and non-verbal communication, effective use of language skills. It intends supporting and developing convincing expression of a point of view on a given issue; it fosters individual and team communication skills on different hierarchical levels and the acquisition of techniques for writing texts that highlight the meaning attributed to professional experiences or events.

Responsible:

Assoc. Prof. PhD Arch. Șerban Țigănaș

e-mail: dragos.tiganas@arch.utcluj.ro

Lecture / project contents

- C1 Architects and communication
- C2 To whom do we address?
- C3 What do we communicate?
- C4 How do we communicate?
- C5 How do you make a visual communication?
- C6. Personal marketing for architects
- C7 Vision, Mission and Values
- C8 Text communication
- C9 Internet communication
- C10 One-on-one or direct communication
- C11 Start on his own as an architect
- C12 How to avoid errors
- C13 Communication of students

Seminar contents

1. Communicating architecture
2. Specific discursive structures
3. Models and discourse elaboration phases
4. Presentation as habit
5. Presentation strategies
6. Narrating images
- 7,8. Oral project presentation
9. Elements of scientific writing
10. Communication and technology mediation
11. Negotiation as communication act
12. Informative and persuasive. Rhetorics
13. Ethical dilemmas in architectural communication
14. Team communication

Evaluation

Methods of evaluation:

Oral support - 50.00 %

Role exercises - 50.00 %



Selected bibliography

- CIALDINI, Robert B., *Psihologia Persuasiunii*, Ed. Business Tech, 2008.
- D'IRIBARNE, P., Chevrier, S., Segal, A. H. J-P and Tréguer-Felten, G. "Interpersonal Communication" in *Cross-Cultural Management Revisited. A Qualitative Approach*, Oxford University Press, 2020.
- HOPKINS, Claude C., *Scientific Advertising*, Fq Classics, 2007.
- JU, I. "Marketing Communication" in Heath a.o. (Eds.), *The International Encyclopedia of Strategic Communication*, 2018.
- MCKINSEY, D., *Strategic Storytelling: How to Create Persuasive Business Presentations*, Kindle Edition, 2014.
- MUCCHIELLI, A. *Arta de a comunica. Metode, forme și psihologia situațiilor de comunicare*, Polirom, Iași, 2005.
- OGILVY, D., *Confesiunile-Unui-Om-de-Publicitate*, Humanitas, 2009.
- ROBBINS, A. *Personal Power*; Nightingale-Conant Corporation, 1992.
- SEIWERT L.J., Gay, F. *ABC-ul Personalității*; 2nd edition, Hardcover,, 2012
- TRÂNCĂ, S., *Brief. 99 de chestii pe care aș fi vrut să le știu când am intrat în publicitate*, Ed. Publica, 2015.

76.00

URBAN ECOLOGY AND SERVICES

Code **77.00**

Semester **2**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Compulsory**

Examination form **Exam**

Objectives

The course targets the development of theoretical, methodological and practical skills for an ecological perspective in the field of spatial planning. It also offers theoretical and methodological knowledge from the perspective of urban ecology, in order to generate and develop theoretical and analytical skills for urban and territorial functions from the perspective urban ecology and to familiarize oneself with the specifics of work in inter- and inter-team teams multidisciplinary.

Responsible:
Assoc. Prof. PhD Arch.
Octav Silviu Olănescu

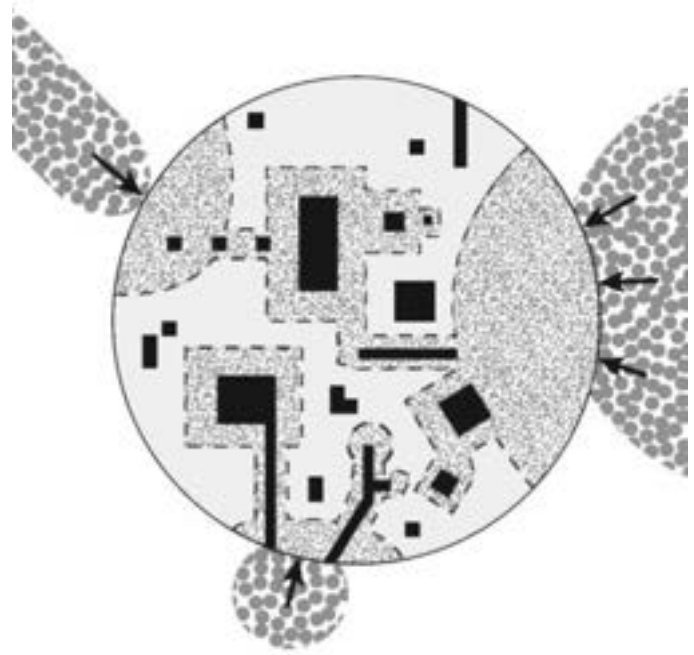
e-mail:
Octav.Olanescu@arch.utcluj.ro

Lecture / project contents

- C1 Introduction. The Evolution of the Man-Nature Relationship
- C2 Sustainable development
- C3 Ecology and built environment
- C4 Ecological theories with implications in the built environment
- C5 Urban ecosystem
- C6 Natural landscape - built landscape
- C7 Urban Ecology - Conflicts I
- C8 Urban Ecology - Conflicts II
- C9 Natural systems in the city I
- C10 Natural systems in the city II
- C11 Human structures. Green spaces, corridors, systems
- C12 Sustainable management of municipal networks
- C13 Case Studies. Conclusions

Seminar contents

-



Evaluation

Written papper – 100 %

Selected bibliography

ALBERTI M. (2008), *Advances in Urban Ecology: Integrating Humans and Ecological Processes in Urban Ecosystems*, Ed. Springer, New York.

BERKOWITZ A.M., C. H. NILON, K. S. HOLLWEG (editori), (2003), *Understanding Urban Ecosystems*, Ed. Springer, New York.

DRAMSTAD W., J. D. OLSON, Richard T. T. Forman, (1996), *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning*, Ed. Island Press, Washington D.C.

FORMAN, Richard T. T., (2008), *Urban Regions: Ecology and Planning Beyond the City*, Ed. Cambridge University Press.

FORMAN, R. T. T., (2014), *Urban Ecology: Science of cities*, Ed. Cambridge University Press.

HALL P., (2002), *Cities Of Tomorrow – Third Edition*, Ed. Blackwell Publishing, Oxford.

77.00

SPECIALISED DESIGN STUDIO - LANDSCAPE ARCHITECTURE

Code **78.00**

Semester **2**

Credits **2**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **3 / week**

Discipline type **Compulsory**

Examination form **Project**

Objectives

This project aims at further developing and applying the theoretical knowledge gained in the frame of the Landscape architecture course, during the 1st semester of the Vth year.

Responsible:

Assoc. Prof. PhD Arch. Andreea Milea

e-mail: Andreea.Milea@arch.utcluj.ro

Lecture / project contents

Through project work, students practice the particular aspects which interfere in the field of landscape architecture, documenting, analysing and characterising a site in view of developing a landscape design proposal for a specific, real site. The project tackles different scales of landscape design, downscaling the study from the master-plan to the details.

Seminar contents

Starting from a given site within the city for the purpose landscaping, students will go through the following stages in project development:

- documentary + landscape analyses, followed by conclusions on the possibilities of intervention + imagining a fitting concept
- setting up drawings (possibly mock-ups) of the arrangements themselves
- detailing some of the proposed arrangements.

Evaluation

Every stage will receive a vote, from 1 to 10. The final vote of the project will be calculated by the formula: documentary and concept 25%, drafting the project 50%, detail 25%.

Selected bibliography

- AMIDON, Jane: Moving Horizons, The Landscape Architecture of Kathryn Gustafson and Partners (Birkhäuser – Publishers for Architecture, Basel, 2005).
- GIROT, Christophe, The Course of Landscape Architecture. A History of our Designs on the Natural World, from Prehistory to the Present (Thames & Hudson Ltd, London, 2016).
- ILIESCU, Ana-Felicia: Arhitectură peisageră (Editura Ceres, București, 2003).
- KOVÁCS, Kázmér: Peisaj cu grădină și casă (Simetria, București, 2011).
- LAE: Landscape Architecture Europe: Fieldwork (Birkhäuser – Publishers for Architecture, Basel, 2006).
- LAE: Landscape Architecture Europe: On Site (Birkhäuser – Publishers for Architecture, Basel, Boston, Berlin, 2009).
- RICHARDSON, Tim (ed.): The Garden Book (Phaidon Press, London, New York, 2003).



78.00

DESIGN SYNTHESIS STUDIO 4

Code **79.00**

Semester **2**

Credits **14**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **12 / week**

Discipline type **Compulsory**

Examination form **Project**

Objectives

The project aims at developing student competencies in architectural design, through the synthetic study of urban and architectural solutions for a site located within the protected area of Cluj-Napoca.

Responsible:

Assoc. Prof. PhD Arch.

Vlad Sebastian Rusu

e-mail: vlad.rusu@arch.utcluj.ro

Teaching team

Assoc. Prof. PhD Arch. Gheorghe Vais

Lect. PhD Arch. Dragoş Dascălu

T. Assist. PhD Arch. Mihai Racu

T.Assist. PhD Arch. Szende Szentesi-Nejur

T.Assist. PhD Arch. Daniel Şerban

Arch. Florin Dascălu

Arch. Benjamin Kohl

Arch. Nicolae Milăşan

Lecture / project contents

A complex architectural project is elaborated during the entire semester, conditioned by the existence of an architectural and urban heritage, by the creation and presentation of an integrated architectural-urban concept, the graphic representation and the public defense of the project.

Seminar contents

Architectural project: exhibition, applications, individual and collective crits, public presentation and evaluation.

Evaluation

Final work evaluation with public presentation.



Selected bibliography

Ernst Neufert, *Manualul arhitectului - elemente de proiectare și de construcție*, Alutus S.A., Miercurea Ciuc, 2004.
David Littlefield, *Metric Handbook- Planning and Design Data*, 3rd Edition, Elsevier, Oxford, 2008.
Gheorghe Vais, *Programe de arhitectură*, UT Press, Cluj-Napoca, 2008.
Adrian Iancu, Teodora Balan, Andrei Nejur, Vlad Rusu, Szende Szentesi, Smaranda Todoran, Calin Spanu, *Povestea unui proiect*, UT Press, Cluj-Napoca, 2012.
Architectural journals from the TUCN library: *El Croquis*, *The Architectural Review*, *Detail* a.o.
Internet: Archdaily.com, Architizer.com, Divisare.com a.o.

79.00

PRACTICAL ACTIVITY 5

Code **80.00**

Semester **2**

Credits **3**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **30**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Developing skills in architectural design applied to concrete activities in a design office.

Responsible:

Assoc. Prof. PhD Arch.

Vlad Sebastian Rusu

e-mail: vlad.rusu@arch.utcluj.ro

Teaching team

Assoc. Prof. PhD Arch. Gheorghe Vais

Lect. PhD Arch. Dragoș Dascălu

T. Assist. PhD Arch. Mihai Racu

T.Assist. PhD Arch. Szende Szentesi-Nejur

T.Assist. PhD Arch. Daniel Șerban

Arch. Florin Dascălu

Arch. Benjamin Kohl

Arch. Nicolae Milășan

Lecture / project contents

Methods specific to each Design Office in which the students operate. Elaborating a project or part of a project for a two-week period. Elaboration of requested materials (memo, written pieces, drawing pieces). Getting familiar with the future activity of an architect, as an employee of a bidding architectural office.

Updating the student portfolio with the projects elaborated during the previous two semesters.

Seminar contents

-

Evaluation

According to specific requirements to each Design Office and practice regulations from the Faculty of Architecture and Urban Planning.

Selected bibliography

Specific to each activity that students undertake in the design offices.



80.00

06_{year}
1st semester

PRACTICAL ACTIVITY 6

Code **81.00**

Semester **1**

Credits **22**

No. of hours/ lecture -

No. of hours/ seminar -

No. of hours project **400**

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Preparing for practice within the frame of a real architecture office.

Updating the student portfolio with the projects elaborated during the previous two semesters.

Responsible:

T. Asist. PhD Arch. Teodora STANCIU

E-mail:

teodora.balan@arch.utcluj.ro

Lecture / project contents

At the beginning of the internship a Convention for Practical activity is signed by the Faculty of Architecture and Urban Planning, the host architecture office and the student.

The Practical Activity 6 takes place in architecture offices, under the supervision of an architect that must be a member of the Romanian Architects Order (OAR).

Seminar contents

At the end of the internship, the students will hand in a file containing:

- Evaluation form, filled-un and signed by the internship supervisor
- Internship notebook, set up by the student
- Portfolio, A4 format, containnig the drawn and written work of the student, signed and stamped by the supervisor, specifying the precise role of the student for each included piece of work (drawn, designed etc.).

Evaluation

The grade offered by the practice tutor is only advisory. The final grade will be determined by the evaluation teachers.

Selected bibliography

It will be determined by each office according to the practice theme.



81.00

DESIGN SYNTHESIS STUDIO 5

Code	82.00
Semester	1
Credits	6
No. of hours/ lecture	-
No. of hours/ seminar	-
No. of hours project	4 / week
Discipline type	Compulsory
Examination form	Project

Objectives

Developing competencies in the design of architecture with concrete application for the subject of pre-diploma and dissertation.

Responsible:
T. Asist. PhD Arch. Teodora STANCIU

E-mail:
teodora.balan@arch.utcluj.ro

Lecture / project contents

Will be set by the diploma tutor and communicated to the student at the beginning of the semester. The design activity goes on under supervision of the selected diploma and dissertation tutor, who will monitor the student's attendance weekly and his/her progress during the process.

The students will work on:

Elaborating a design brief to support their pre-diploma and diploma projects;

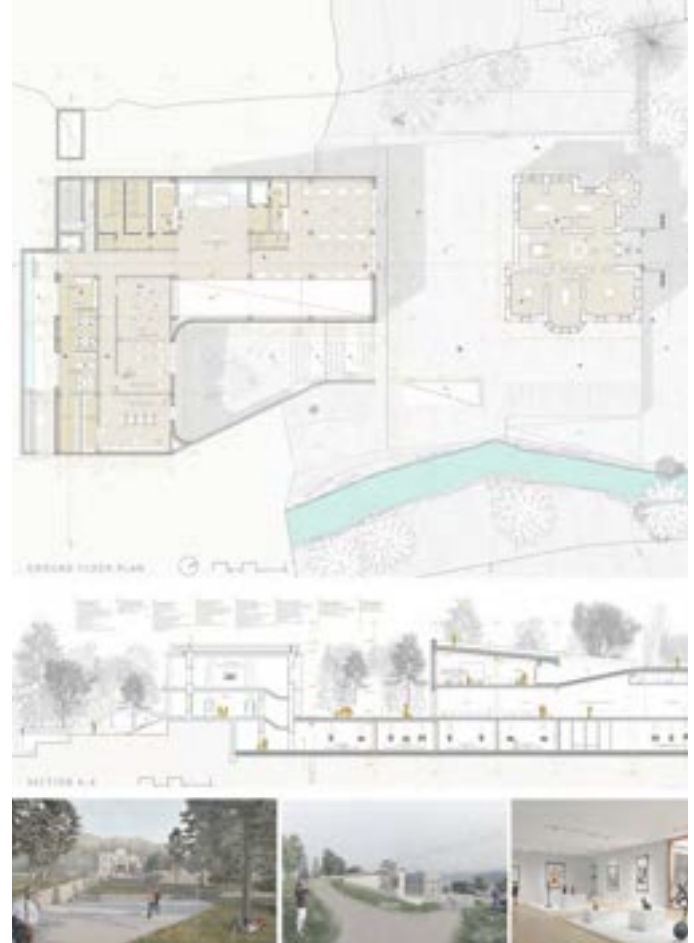
Setting up a documentation file that informs the development of their projects, including at least 20 case-studies, relevant for the chosen topic;

Identifying two adequate sites on which to develop the design brief set-up for the pre-diploma;

Developing conceptual projects, according to the same design brief, for each of the two identified sites.

Seminar contents

-



Evaluation

Architectural project is evaluated by the pre-diploma jury. The jury decides whether and which of the two conceptual solutions may be further developed for the diploma project.

Selected bibliography

Manualul arhitectului: elemente de proiectare si de constructie / Peter si Cornelius Neufert, Ludwig Neff, Corinna Franken – Miercurea Ciuc; Alutus, 2004
Programe de arhitectura / Vais, Gheorghe, Editura tehnica UTC-N, 1998 3.
Specific for each student, according to the topics chosen for their individual projects.

82.00

ENGLISH

Code	83.10
Semester	1
Credits	2
No. of hours/ lecture	2 / week
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Elective
Examination form	Colloquium

Objectives

The course aims developing the students' oral communication skills within professional technical contexts. The topics include

- developing specialised lexical, grammar and discursive skills
- developing the ability of understanding, communicating and evaluating a message within a technical professional context

Responsible:
Assoc. Prof. PhD Sanda Padurețu

E-mail:
Sanda.Paduretu@lang.utcluj.ro

Lecture / project contents

Conversation
Improvement of writing, reading, speaking and understanding skills
Working in pairs and in teams
Personal coordinates
Curriculum vitae
Professional communication
Personal agenda
Culture and civilisation elements

Seminar contents

-

Evaluation

Colloquium



Selected bibliography

Pădurețu, Sanda, *English for Architecture*, Ed. Risoprint, 2015.

83.10

FRENCH

Code **83.20**

Semester **1**

Credits **2**

No. of hours/ lecture **2 / week**

No. of hours/ seminar -

No. of hours project -

Discipline type **Elective**

Examination form **Colloquium**

Objectives

The course aims developing the students' oral communication skills within professional technical contexts. The topics include

- developing specialised lexical, grammar and discursive skills
- developing the ability of understanding, communicating and evaluating a message within a technical professional context

Responsible:

Lect. dr. Aurel Bărbîntă

E-mail:

Aurel.Barbinta@lang.utcluj.ro

Lecture / project contents

Conversation

Improvement of writing, reading, speaking and understanding skills

Working in pairs and in teams

Personal coordinates

Curriculum vitae

Professional communication

Personal agenda

Culture and civilisation elements

Seminar contents

-

Evaluation

Colloquium.



Selected bibliography

Cilianu, Lascu, C. - *Franceza pentru afaceri* – Ed. Teora, București, 1999.

83.20

GERMAN

Code	83.30
Semester	1
Credits	2
No. of hours/ lecture	2 / week
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Elective
Examination form	Colloquium

Objectives

The course aims developing the students' oral communication skills within professional technical contexts. The topics include

- developing specialised lexical, grammar and discursive skills
- developing the ability of understanding, communicating and evaluating a message within a technical professional context

Responsible:
Asist. CDA Miruna Opris

E-mail:
Miruna.Opris@lang.utcluj.ro

Lecture / project contents

Conversation
Improvement of writing, reading, speaking
and understanding skills
Working in pairs and in teams
Personal coordinates
Curriculum vitae
Professional communication
Personal agenda
Culture and civilisation elements

Seminar contents

-

Evaluation

Colloquium.



Selected bibliography

Opris, M., *Deuthsch in Studium und Wissenschaft*, UTPRESS, Cluj-Napoca, 1999.

83.30

ADMINISTRATION AND PUBLIC RELATIONS

Code	83.40
Semester	1
Credits	2
No. of hours/ lecture	2 / week
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Elective
Examination form	Colloquium

Objectives
To be specified

Responsible:	Lecture / project contents
To be determined	
E-mail:	To be determined

Seminar contents

-

Evaluation

Colloquium.

Selected bibliography



83.40

06_{year}
2nd semester

ELABORATING THE DISSERTATION

Code **84.00**

Semester **2**

Credits **14**

No. of hours/ lecture -

No. of hours/ seminar **5 / week**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Elaboration of the dissertation for the final examination.

Responsible:
Prof. PhD Arch. Virgil Pop

E-mail:
arh.virgil.pop@gmail.com

Lecture / project contents

Elaboration of an extended research paper, on a topic established together with the student's tutor and connected to the student's diploma project. The dissertation shows the graduating student's ability of conducting research in architecture, of communicating his / her research process and findings through academic writing.

Seminar contents

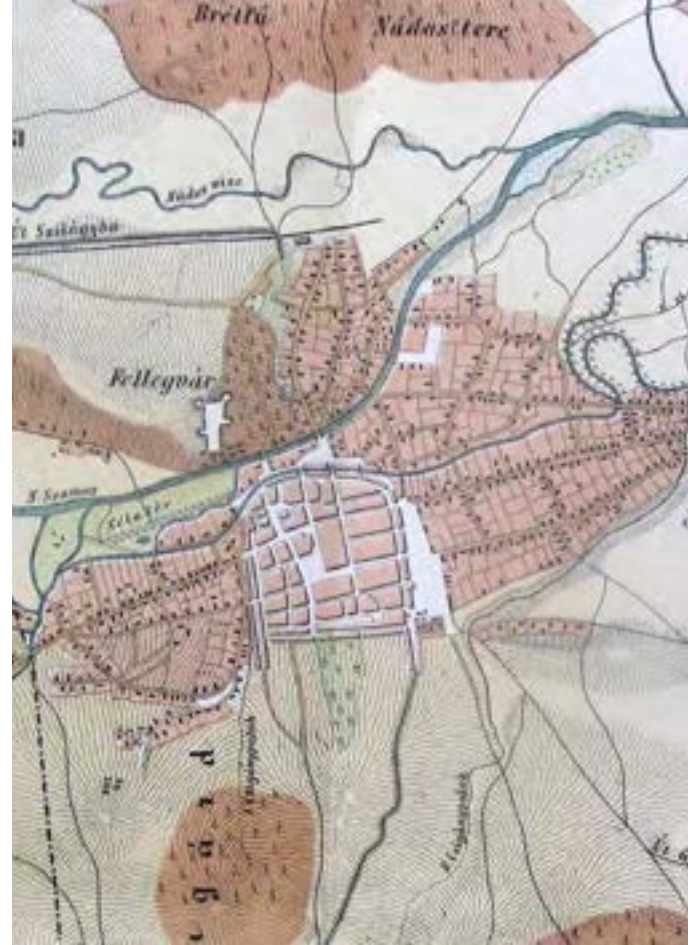
Will be set by the diploma and dissertation tutors and communicated to the supervised students at the beginning of the semester.

Evaluation

The evaluation will be made by the diploma tutor.

Selected bibliography

It will be determined by each tutor according to the subject of the diploma project, together with the student.



84.00

ELABORATING THE GRADUATION PROJECT

Code **85.00**

Semester **2**

Credits **14**

No. of hours/ lecture -

No. of hours/ seminar **5 / week**

No. of hours project -

Discipline type **Compulsory**

Examination form **Colloquium**

Objectives

Preparing for the final examination.

Responsible:
Assoc. Prof. PhD Arch. Șerban Țigănaș

E-mail:
dragos.tiganas@arch.utcluj.ro

Lecture / project contents

Elaboration of a complex architectural project, on a site and theme established together with the student's tutor , validated through the "pre-diploma" defense. The project shows the graduating student's ability of conducting the in-depth fundamentation and elaboration of architectural and urban planning projects, of convincingly communicating their research and design process, as well as results, via a range of project media.

Seminar contents

Will be set by the diploma and dissertation tutors and communicated to the supervised students at the beginning of the semester.

Evaluation

The evaluation will be made by the diploma tutor.

Selected bibliography

It will be determined by each tutor according to the subject of the diploma project, together with the student.



85.00

ADVICE IN TECHNOLOGY AND STRUCTURE

Code **86**

Semester **2**

Credits **-**

No. of hours/ lecture **2 / week**

No. of hours/ seminar **-**

No. of hours project **Compulsory**

Discipline type **Colloquium**

Examination form

Objectives

The course seeks to integrate and to apply the already acquired knowledge in structural theory, architectural technology, installations for a concrete (exact) project - the project of the diploma elaborated individually.

Responsible:

Lect. PhD Eng. Imola Kirizsan

e-mail: Imola.Kirizsan@arch.utcluj.ro

Lecture / project contents

Structural and technical elaboration of the diploma project, in consultancy with the structural experts teaching the discipline.

Seminar contents

Presenting the architectural solution approved by the pre-diploma committee.

Analysis of the site, the architectural program through the perspective of architectural and constructive conception.

Elaborating the structural system, choosing the materials in the case of superstructure and infrastructure. Finalizing the constructive and structural concept.

Choosing the execution techniques and technologies. Implementing the results of the activity in plans, sections, details.

Evaluation

The evaluation will be made by the structural consultant.



Selected bibliography

Presenting the architectural and constructive concept (week7). Presenting the plans, the sections (2) and a printed architectural detail.

86.00

DISSERTATION DEFENCE

Code	103
Semester	2
Credits	10
No. of hours/ lecture	-
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Compulsory
Examination form	Exam

Responsible:
Prof. PhD Arch. Virgil Pop

E-mail:
arh.virgil.pop@gmail.com

Objectives

Defense of the dissertation paper, involving the submission of the work, to be read by the dissertaion jury prior to the oral presentation.

Lecture / project contents

An extended research paper, on a topic established together with the student's tutor and connected to the student's diploma project. The dissertation shows the graduating student's ability of conducting research in architecture, of communicating his / her research process and findings through academic writing. It is defended via an oral and visual discourse delivered in front of the jury, as well as via answers to the possible jury questions.

Seminar contents

-

Evaluation

By the dissertation jury, including external invited members.

Selected bibliography

-



103.00

PROJECT DEFENCE

Code	104
Semester	2
Credits	10
No. of hours/ lecture	-
No. of hours/ seminar	-
No. of hours project	-
Discipline type	Compulsory
Examination form	Exam

Responsible:
Assoc. Prof. PhD Arch. Șerban Țigănaș

E-mail:
dragos.tiganas@arch.utcluj.ro

Objectives

Defense of the diploma project, involving the submission of the work, pre-viewed by the diploma jury prior to the oral presentation.

Lecture / project contents

A complex architectural project, on a site and theme established together with the student's tutor, validated through the “pre-diploma”. The project shows the graduating student's ability of conducting the in-depth fundamentation and elaboration of architectural and urban planning projects, of convincingly communicating their research and design process, as well as results, via a range of project media.

Seminar contents

-

Evaluation

By the dissertation jury, including external and international invited members.



Selected bibliography

-

104.00

CONTACT



UNIVERSITY INTERNATIONAL OFFICE

erasmus@staff.utcluj.ro

<http://bri.utcluj.ro/>

28, Memorandumulu, 400114 Cluj-Napoca, Romania

Tel: +40-264-202261

Fax: +40 264 591690



DEAN

Tel: +40-264-401844

DEAN'S SECRETARY

Tel: +40-264-590255

Fax: +40-264-401847



FACULTY ERASMUS OFFICE

Assoc. Prof. PhD Arch. Cristina Purcar

Teach. Assist. PhD Arch. Laura Patachi



Erasmus.FAU@arch.utcluj.ro

office hours: Wednesday, 09:00am - 12:00pm

room 13, 34-36, Observatorului, Cluj-Napoca, Romania

Tel: +40-264-401847

Edited by Erasmus coordinators Silviu Aldea, Laura Patachi, Cristina Purcar
in collaboration with students Raul Chiorean, Mălina Encian, Răzvan Muntean, Diana Todea

FAU

2021