General Information:

Name of Course: # COMPLEX DESIGN

Course Code:	PMRESNE057A
Semester:	9th
Number of Credits:	8
Allotment of Hours per Week:	4 Practical Lessons /Week
Evaluation:	Signature (with grade)
Prerequisites:	**Completed Building Constructions 5, Building Design 7**

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Introduction, Learning Outcomes:
The course assignment to be completed by students with the guidance of the instructor is designing a public building with special emphasis on functional features in a designated multifunctional urban area. Students are required to carry out an urban design analysis and write an essay on successful examples of implemented architectural projects. The design assignment is to be completed using effective graphic tools and an architectural model is also to be presented.
This subject includes an architectural design project in the practical part (marked with a P) where students can develop their architectural skills.

The finished and accepted project is shown and present during the Final Presentation at the front of a jury for demonstrate the acquired architectural knowledge and abilities.

The course will focus on:
- Individual design processing, and developing upon relevant methodologies and design techniques
- Manage complex architectural relationship like demonstrate a progression in terms of understanding relevant functional needs, programming and construction techniques in the same time
- Clear architectural communication of the project to a jury
- Carrying out within a specified time

General Course Description and Main Content:
Brief Syllabus: The purpose of this course is to introduce students to architectural design from a complex view that is covering those parts of the planning process which are supervised by specialised departments. Furthermore, this subject intends to have students practise the design phase related to documentation required for planning permission. During the preparation period, students study existing buildings with similar functions and examples in special scientific literature, and on this basis, they finalize their design project. During the design process, they continuously consult with the appointed or chosen teachers from the Department of Design and the Department of Building Constructions.

In addition to their final drawings, at the end of the semester they submit their essay which includes preliminary studies, the assessment of the different alternatives, the technical description of the architectural unit and the necessary drafts. Students normally construct a paper model as well.

This subject includes an architectural design project in the practical part (marked with a **P**) where students can develop their architectural skills.

Methodology:
The course is based on individual architectural skills with regular consultations and presentations.

Schedule:
The semester is divided into two principle periods and attendant exercises.

The rough outline of the schedule is as follows:
Week 1-7: Project (conception)
Week 8: Midterm Presentation. – CONCEPT, PRELIMINARY DESIGN (11/02/2015) 35p

- Required contain presented with printed posters:
    - Process Dairy Booklet (in progress)
    - Analyses of the Chosen Function (inspirations, examples, conditions, relationships in space, needs requirements, etc.)
    - Architectural Program (type, scale, use, form ideas, architectural ideas, materials, primer structures, functioning)
    - Presentation of the Building Site (analyses, diagrams, maps, photos, master plans, geographical and morphological conditions)
    - Site Plan with Building's Surrounding (1:500) (with built and natural environment)
    - Floor Plans of Each Different Levels (1:200)
    - Sections (1:200) (with the necessary number of understanding)
    - Elevations (1:200) (with the necessary number of understanding)
    - Perspective or Axonometric Views (with the necessary number of understanding)
    - Right Scale Physical Model (1:500 or 1:200) (with the artificial and natural environment

Week 9-15: Project (development, completing)
Week 15: Final Presentation. – FINAL DESIGN PROJECT 55p

- Required contain presented with printed posters:
    - General Description of Project (with analyses, function, architectural program, context and concept, presentation of building's site surround)
    - Site Plan (1:500) a./ the building site's boundaries, fences, gates, parking places b./ the contour lines of the slope, the main level heights c./ the connecting road system inside and outside the plot d./ the cardinal points e./ the planned buildings and objects of the plot with their names, main measures, and height dates f./ the sign and names of roads, covered and green areas, the main level heights g./ the height of ledge and ridge, the number of storeys h./ tracks of the public utilities i./ the circulation of vehicles, transportation, people with different signs j./ eventual possible extension
    - Floor Plans of Each Different Levels (1:100 or 1:200 – discussed by the supervisor) a./ beyond the main dimensions contain the measures of each room b./ doors with opening direction, windows with subdivisions c./ marking the functional necessary installation d./ the names, measures and coverings of the rooms e./ marking the close surroundings
    - Sections (1:100 or 1:200 – discussed by the supervisor, in necessary number for understanding) a./ the typical height measures and the plan measures of the axis b./ the level heights c./ the names of the structures and materials, the order of layers d./ the main equipment with greater need of space
    - Elevations of Each Different Side (1:100 or 1:200 – discussed by the supervisor)
    - Perspective or Axonometric Views (in necessary number for understanding, min. 3 about the inner and 3 about the outer spaces), in high quality graphically
    - Interior Design Concept or Technical Details (1:10, 1:20, 1: 50 - discussed by the supervisor)
    - Right Scale Physical Models (1:200 about the building and its close environment, and 1:500 or 1.1000 with the built and natural environment)
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Studio Culture:
The course is based on through collaboration, participation and discussions trough lessons. This is an interaction between Students and Faculty; used the teaching methods like 'Problem-based learning' and 'learning-by-doing'. The communication and work should be reflect a respect for fellow students and their desire to work with regard to noise levels, noxious fumes, etc – from each site of participants.

Attendance:
Attending is required all classes, and will impact the grade (max. 10%). Unexcused absences will adversely affect the grade, and in case of absence from more than 30% of the total number of lesson will be grounds for failing the class. To be in class at the beginning time and stay until the scheduled end of the lesson is required, tardiness of more than 20 minutes will be counted as an absence. In the case of an illness or family emergency, the student must present a valid excuse, such as a doctor's note.

Evaluation + Grading
Grading will follow the course structure with the following weight: **Midterm Presentation – CONCEPT, PRELIMINARY DESIGN - 35%, Final Presentation - FINAL DESIGN PROJECT - 55%.** The remaining 10% will be assessed according to participation, progress, effort and attitude. Please note that attendance will adversely affect one's grade, both in direct grade reduction and in missing work in the development of a project. The final grade will be based on the following guidelines:

5. Outstanding work. Execution of work is thoroughly complete and demonstrates a superior level of achievement overall with a clear attention to detail in the production of drawings, models and other forms of representation. The student is able to synthesize the course material with new concepts and ideas in a thoughtful manner, and is able to communicate and articulate those ideas in an exemplary fashion in.

4. High quality work. Student work demonstrates a high level of craft, consistency, and thoroughness throughout drawing and modelling work. The student demonstrates a level of thoughtfulness in addressing concepts and ideas, and participates in group discussions. Work may demonstrate excellence but less consistently than an '5' student.

3 Satisfactory work. Student work addresses all of the project and assignment objectives with few minor or major problems. Graphics and models are complete and satisfactory, exhibiting minor problems in craft and detail.

2. Less than satisfactory work. Graphic and modelling work is substandard, incomplete in significant ways, and lacks craft and attention to detail.

1. Unsatisfactory work. Work exhibits several major and minor problems with basic conceptual premise, lacking both intention and resolution. Physical representation in drawing and models is severely lacking, and is weak in clarity, craft and completeness.

Grading Scale:

Numeric Grade:	5	4	3	2	1
Evaluation in points:	89%-100%	77%-88%	66%-76%	55%-65%	0-54%

PTE Grading Policy:
Information on PTE's grading policy can be found at the following location:
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Students with Special Needs:
Students with a disability and needs to request special accommodations, please, notify the Deans Office. Proper documentation of disability will be required. All attempts to provide an equal learning environment for all will be made.

Readings and Reference Materials:

- **Architects' data / Ernst and Peter Neufert ; updated by Johannes Kister ; transl. by David Sturge**
- **Space Planning Basics** – May 4, 2009 by Mark Karlen
- **Human Dimension & Interior Space: A Source Book of Design Reference Standards** – November 1, 1979 by Julius Panero , Martin Zelnik
- **The Interior Plan: Concepts and Exercises** – September 26, 2011 by Roberto J. Rengel
- **Architectural Graphics** Francis D. K. Ching, 5th Edition edition (8 Dec 2009)
- **Drawing Architecture AD** (Architectural Design) Neil Spiller
- **Building Construction Illustrated** Francis D. K. Ching, Wiley; 5 edition (February 17, 2014)
- **Basics Architecture: Representational Techniques** Lorraine Farrelly (18 Nov 2007)
- **Constructing Architecture: Materials, Processes, Structures**, Andrea Deplazes Publisher: Birkhauser; 1 edition (October 1, 2005)