Marmara University Faculty of Architecture
School of Architecture and Design
2022-2023 Fall Semester

Course Title	**Code**	**Semester**	**Hour (T+P)**	**Credit**	**ECTS**
Detail and Design	ARCH 403	7	2+0	2	2
Prerequisities	-				
Language of Instruction	English				
Course Type (Required / elective)	Required				
Course Coordinator	-				
Instructor /e-mail	Assist. Prof. Dr. H. Nur KIZILYAPRAK / nur.kizilyaprak@marmara.edu.tr				
Assistants	Res. Assist. Rumeysa TEMEL				

Goals	Understanding of architectural details, viewing them within part-to-whole relationship with the building, understanding their visual and functional contribution to the building and perceiving the detailing process as the smallest unit of design “codes” of buildings.
Learning Outcomes	1. Students gain the ability to consider the concept of "architectural detail" as a design problem. 2. Students gain awareness of different perspectives on architectural detailing and the meaning of detail. 3. Students gain the ability to analyze an existing architectural detail in terms of design input and the performances it meets. 4. Students gain awareness of different systematic detail development approaches. 5. Students gain the ability to consider the act of detailing as a systematic and rational process.
Course Content	To understand, apply and synthesize basic knowledge of use of materials, building techniques, construction, building physics and climate by focusing on tectonic design of building parts and given conditions: ▪ “Building”, architectural technology terminology and detailing approaches ▪ Analysis of building and building elements with systems thinking, understanding the effects of construction methods and material use ▪ Interaction user-environment/location-building systems ▪ Design principles and performance requirements of building elements ▪ Intuitive and systematical detail design approaches

Assessment Criteria	**Assessment Components**	
	Weekly Studies	%10 (before midterm) %10 (before final)
	Mid-term	%30 (midterm submission)
	Final Exam	40% (final submission) 10% (student presentation)
	TOTAL	100%

Midterm grade:-
Final grade: 50
Course success: 50

WEEKLY TOPICS AND PREPARATIONS	
Weeks	**Topics**
Week 1 03.10.2023	Lecture – Introduction
Week 2 10.10.2023	Lecture – Systematic detail development approaches and the "**Grammar of Detailing**"
Week 3 17.10.2023	Lecture – Distribution of details among students for DETAIL Magazine
Week 4 24.10.2023	Class Discussions – **External Wall** Details Analysis According to "Grammar of Detailing" Approach
Week 5 31.10.2023	Class Discussions – **Floor** Details Analysis According to "Grammar of Detailing" Approach
Week 6 07.11.2023	Class Discussions – **Roof** Details Analysis According to "Grammar of Detailing" Approach
Week 7 14.11.2023	Class Discussions – **All Details** Analysis According to "Grammar of Detailing" Approach
Week 8 20.11.2023 - 26.11.2023	**MIDTERM SUBMISSION**
Week 9 28.11.2023	Lecture – Introduction to "**Detail Patterns**" Approach
Week 10 05.12.2023	Student Presentation – Detail Patterns According to "**Function 1 - Controlling water leakage**"
Week 11 12.12.2023	Student Presentation – Detail Patterns According to "**Function 3 - Controlling heat flow**"
Week 12 19.12.2023	Class Discussions – **Point Detail 1** Analysis According to Function 1 & Function 3
Week 13 26.12.2023	Class Discussions – **Point Detail 2** Analysis According to Function 1 & Function 3
Week 14 02.01.2023	Class Discussions – **Point Detail 3** Analysis According to Function 1 & Function 3
Week 15 09.01.2024	Class Discussions – **All Point Details** Analysis According to Function 1 & Function 3
Week 16 15.01.2024 - 28.01.2024	**FINAL SUBMISSION**

REFERENCES

Allen, E. (1993). *Architectural detailing function constructibility aesthetics*. New York: Wiley.

Detail Magazines

Bachman, L. R. (2003). *Integrated buildings: the systems basis of architecture*. Mexico: John Wiley & Sons, Inc.

Dickinson, D. (1997). *Expressive details: materials, selection, use*. New York: McGraw-Hill.

Emmitt, S., Olie, J. and Schmid, P. (2004). *Principles of architectural detailing*. Oxford, UK; Malden, MA: Blackwell Pub.

Ford, E. (2011). *The architectural detail*. New York: Princeton Architectural Press.

Herrmann, E.M., Krammer, M., Sturm, J., & Wartzeck, S. (2015). *Enclose-build: The building envelope - facade, wall, roof*. Basel: Birkhäuser Verlag.

Leatherbarrow, D. & Mostafavi, M. (2002). *Surface architecture*. Cambridge: MIT Press.

Meijs, M. & Knaack, U. (2009). *Principles of construction: components and connections.* Berlin: Birkhäuser Verlag.

Moro, J. L., Rottner, M., Alihodzic, B. & Weissbach, M. (2009). *Baukonstruktion vom Prinzip zum Detail, Band 2*. Berlin: Springer-Verlag.

Moussavi, F. (2009). *The function of form*. NY: Actar and Harvard Graduate School of Design.

Rush, Richard D. (1986). *The building systems integration handbook*. New York: John Wiley & Sons, Inc.

Schittich, C. (2006). *In Detail: Building Skins.* Basel: Birkhäuser Verlag.

Watts, A. (ed.) (2011). *Modern Construction Envelopes*. Wien: Springer-Verlag.

ECTS / WORKING HOUR TABLE

Activities	**Number of Weeks**	**Duration (Hour)**	**Working Hours**
Duration of the Course (Including Exams: 14 x Total Weekly Course Hour)	14	2	28
Extracurricular Working Hour (Preparatory Work, Review,Internet studies etc.)	12	2	24
Midterm exam	1	2	2
Homeworks and Presentations	3	2	6
Final Exam	1	2	2
Working Hours in Total			62
Working Hours in Total / 30			2,06
ECTS Credit of the Course			2