

DIGITAL COMMUNICATION I (SECTION1) FALL 2019

> brief

Designing and representing are essential steps of architectural design since beginning of the profession. Tools and techniques to design and represent always evolves with the dynamics of the day. Today, with the dominance of developing technology, working system of architecture and production systems shift into more digital based tools. Digital tools become an important element in both design and representation phases of architectural production since digitalization ease and fasten the production process. As a result, demand and usage of digital tools increases both in architectural practices and academia. Digital communication courses introduces effective usage of digital tools for architecture and interior design students to meet these needs and have a knowledge on the topic.

The course focuses on 2D drafting, 3D modeling and digital representation techniques in architectural representation techniques. For this purpose Autocad, Rhino, Photoshop and Illustrator will be used for understanding necessary digital drawing, modelling and presentation tools.

> objectives

The aim of the course is to bringing architectural representation techniques into the computer realm. In this course; 2d drafting, 3d modeling and graphic processing platforms were used simultaneously to represent and express the potential of architectural designs. 2d and 3d tools are used in design phases then graphic design tools are used together with design tools to enhance digital post-production and representation skills. Course aims to introduce digital communication and production tools and their usage in every step of architectural design process to the students. By mastering digital representation methods is becoming a crucial tool due to the increasing demand in interior architectural practices and academia. The application of the techniques will be explicit within a digital premise, which include image manipulation, diagrams and modeling. Thus the coursework will use a 3D modeling and graphic platforms to represent and express the potential of architectural designs.

> methodology

The methodology unfolds the use of Digital Communication to a conceptual manipulation design should engage from the earliest stages of the design process. Course is formed as two integrated terms. First term aims to introduce students to the computer realm and role of the digital tools in this century. To understand this powerful role of digital communication techniques for architectural representation, course starts with the 2D drafting for exploration of the digital equivalent of traditional technical drawing skills obtained in the first two semesters. Primary technical drawing rules are implemented in the digital drafting softwares not only with the digital but also with the physical prints. Predominant digital 2D drafting tools are introduced and methods of technical drawing on digital platforms are studied.

With using the basic knowledges on these platforms, 3D modelling techniques and programs are introduced following the 2D tools. 3 dimensional thinking and designing abilities are aimed to be developed through digital platforms. Through the use of technical drafting and modeling techniques, digital communication also studies rendering and post-processing phase of image and graphic presentation.

Across an array of visual representations that include but are not limited to modeling, drafting rendering and graphic design the methods describe the conveyance of ideas and information in forms that can be read or looked upon.

NOTE: The course requires the individual use of a computer that runs Microsoft Windows.

> course outcomes

The course outcomes structure will include all of the following elements. Upon successful completion of the course, the learner is expected to be able to:

- Understanding the powerful role of digital communication techniques for architectural representation.
- Ability to qualitative and quantitative represent the existing environment by diagrams, mappings, modeling, rendering and graphic presentation.
- Ability to express the ideas by means of digital graphical methods.
- Ability to produce the technical drawings.
- Ability to use the renderings and graphic visualization in the digital medium by means of hybrid representations.

At the end of the course, students are expected to have control on digital tools for architectural production and representation. The application of the techniques will be explicit within a digital premise, which include drafting, modelling, image manipulation, diagrams, video editing, parametric modeling and visualization in different platforms. Thus the coursework will use a 3D modeling and graphic platforms to represent and express the potential of architectural designs.

The course's translates the learning outcomes, these will prevail unless the instructors will inform otherwise. In case of alteration, this will be done both verbally (during studio hours) and by writing (email and studio posted announcement).

> schedule

	WEEK	pre-class		title	assignment	points
26.09.19	1			Introduction program download		
27.09.19	2	PRE 1 <small>SHORT UP QUES</small>	AUTOCAD - TECHNICAL DRAWING	Autocad 1 InterFace/basic terminology,creating drawings,drawing tools		Pre-class 1: 20 pts due date: Fri 09:45
28.10.19	3	PRE 2 <small>SHORT BB QUES</small>		Autocad 2 Modifying and manipulating drawings	ASGN 1 3D PLOTTER	Pre-class 2: 20 pts due date: Fri 09:45 Assignment 1: 100 due date: 02.10.19 Thursday 23.00
21.10.19	4	PRE 3 <small>SHORT UP QUES</small>		Autocad 3 Managing drawing with layer and Block/Dimension, text, Lineweight/ Plot,hatch, export,illustrator		Pre-class 3: 20 pts due date: Fri 09:45
18.10.19	5	PRE 4 <small>SHORT BB QUES</small>	RHINO - 2D	Rhino 1 basic terminology, interface, Drawing tools, curves, surfaces	ASGN 2 3D DRAWING	Pre-class 4: 20 due date: Fri 09:45 Assignment 2: 100 due date: 17.10.19 Thursday 21.59
25.10.19	6	PRE 5 <small>SHORT BB QUES</small>		Rhino 2 2d to 3d / basic extrusions		Pre-Class 5: 20 pts due date: Fri 09:45

01.11.19	7	Workshop Week				
08.11.19	8	PRE 6 <small>SHORT RE QUIZ</small>	RHINO - 3D	Rhino 3 Basic operations, transformations, modifications/ Creating surfaces	ASGN 3 <small>RASTO MONITORING</small>	Pre-class 6: 20 <small>due date: Fri 09:45</small> Assignment 3: 100 <small>due date: 07.11.19 Thursday 23.59</small>
15.11.19	9	PRE 7 <small>SHORT RE QUIZ</small>		Rhino 4 Surface, Solid and Loft Tools		Pre-class 7: 20 <small>due date: Fri 09:45</small>
22.11.19	10		ILLUSTRATOR	Drafting + Diagramming Exporting line drawings from Rhino		Assignment 4 Q&A
29.11.19	11	PRE 8 <small>SHORT RE QUIZ</small>		Drafting + Diagramming + Illustrator Vectoral graphics on Illustrator	ASGN 4 <small>RASTO MONITORING</small>	Pre-class 8: 20 pts <small>due date: Fri 09:45</small> Assignment 4: 100 <small>due date: 28.11.19 Thurs</small>
06.12.19	12	PRE 9 <small>SHORT RE QUIZ</small>	RENDERING & POST-PRODUCTION	Vray Download, Basic Vray tools, Ray render Atmosphere studies	ASGN 5 <small>ENVILION POST-PRODUCTION</small>	Pre-class 9: 20 <small>due date: Fri 09:45</small> Assignment 5: 100 <small>due date: 05.12.19 Thursday 23.59</small>
13.12.19	13	PRE 10 <small>SHORT RE QUIZ</small>		Vray + Photoshop atmosphere studies and collage on photoshop		Pre-class 10: 20 <small>due date: Fri 09:45</small>
20.12.19	14			Photoshop atmosphere studies and collage on photoshop Q&A	PRE-FINAL <small>PRESENTATION</small>	Pre Final:50 <small>due date: 19.12.19 Thursday 23.59</small>
	16-17					Final: 250
	Will be announced					
Total: 1000 pt						Pre-class: 200 Assignments: 500 Pre-final: 50 Final: 250

NOTE: The Schedule prevails unless the instructors will inform otherwise. In case of alteration, this will be done both verbally (during studio hours) and by writing (email and studio posted announcement).

> submission

- **Pre-class** assignments are based on the material that will be added to the Blackboard before class about that week's course and will be available digitally on **Blackboard** between **09:30-09:50** in class.

- **Assignment** details are announced in the class and expected to be **submitted on Blackboard** in the given format.
- All the **exercise and assignment files** should be submitted to the **Blackboard** one day before the class (Thursday 23.59)
- Exercise and assignment files should consist digital files (.dwg, .3ds, .psd, etc.)
- Save the file with your surname,name and assignment tag (e.g. **koolhaas_rem_asgn1.3dm**)
- Google Drive or/and Blackboard will be used for submissions.

Students are also encouraged to submit any additional elements relevant for the project. (Sketchbook, sketches, images, movies, etc.)

> readings

The recommended readings are presented for a clear understanding on the importance of the course contents and applications.

- **Unwin, S** (2014) Analysing architecture. Routledge, New York.
- **Farrelly, L** (2015) Representational techniques for architecture. Fairchild Books AVA, New Jersey.
- **Bielefeld B,** (2012) Architectural drawing : a visual compendium of types and methods. Wiley, New York.
- **Linton, H** (2013) Portfolio design. W. W. Norton & Company, New Jersey.
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Students are encouraged to extend their reading culture by bringing in additional elements relevant for the course and/or the assignments.

> assessment

The assessment methods are presented for a clear perspective on the importance of the course workflow.

- Preclasses : %20 (100 pts sub-total)
 - Pre-class 01: 20 pts
 - Pre-class 02: 20 pts
 - Pre-class 03: 20 pts
 - Pre-class 04: 20 pts
 - Pre-class 05: 20 pts
 - Pre-class 06: 20 pts
 - Pre-class 07: 20 pts
 - Pre-class 08: 20 pts
 - Pre-class 09: 20 pts
 - Pre-class 10: 20 pts
- Assignments: %55 (600 pts sub-total)
 - Assignment 1: 100 pts
 - Assignment 2: 100 pts
 - Assignment 3: 100 pts
 - Assignment 4: 100 pts
 - Assignment 5: 100 pts
 - Pre-Final: 50 pts
- Final: %25 points (stands for final examination)
 - Final Submission: 250 pts
- Total: 1000 pts

Students are encouraged to extend their studio culture by bringing in additional elements relevant for the project. (books, movies, papers, etc.)

> grades

Grades:

- A** (*Outstanding*) work meets the highest standards exceeding the stated problem objectives and requirements and in showing solid evidence of creativity and/or insight; the highest level of proficiency is evident; salient issues are highly mastered.
- A -** (*Excellent*) work is exceptional in exceeding the stated problem objectives and requirements and in showing solid evidence of creativity and/or insight; a high level of proficiency is evident; salient issues are clearly mastered.
- B +** (*Very Good*) work meets high standards stated by the problem and addresses the stated objectives very clearly, shows very good evidence of creativity and/or insight; the work shows that salient issues are understood very well, reveals high skills for this level of expectations.
- B** (*Good*) work meets most of the standards requirements of the problem and addresses the stated objectives well; shows evidence of creativity and/or insight; work shows that salient issues are understood well; reveals good skills for this level of expectations.
- B -** (*Reasonable*) work meets more than adequate stated requirements of the problem and addresses the stated objectives reasonable; shows some reasonable command creativity and/or insight; work shows that salient issues are reasonable understood, reveals more than adequate skills for this level of expectations.
- C +** (*Satisfactory*) meets basic objectives and requirements in the project statement; shows acceptable evidence of creativity and/or insight, and respectably developed; reveals acceptable skills for this level of expectations.
- C** (*Satisfactory*) meets some basic objectives and requirements of the stated project; shows some basic evidence of creativity and/or insight, and respectably developed; reveals some basic skills for this level of expectations.
- C -** (*Satisfactory*) falls short of meeting basic requirements in several ways of the stated project; falls short of meeting basic evidence of creativity and/or insight, and respectably developed; falls short of meeting basic skills for this level of expectations.
- D +** (*Marginal*) work meets the slightly better than the required minimum objectives and requirements in the project statement; shows marginal evidence of creativity and/or insight, though not well developed; slightly better than the required evidence of understanding the salient issues, reveals marginal skills for this level of expectations.
- D** (*Low Pass*) work meets the minimally acceptable objectives and requirements in the project statement; shows low evidence of creativity and/or insight, though not well developed; low evidence of understanding the salient issues, reveals minimal skills for this level of expectations.
- F** (*Fail*) work meets failure to address the minimum objectives as specified in the project statement; substantially incomplete work; very poor performance through lack of work process and failure to submit required course work; reveals the inability to perform conceptually and practically at the level of competency for this studio level.

> attendance

For a successful work process a **70% attendance is obligatory** means **minimum of 11 presences out of 14 studio classes** (4 absence with medical report). In order to have chance of late submission students must confirm the medical report.

More than 15 min late attendances will mark **late**.

Attending assignment or final presentations are crucial elements in the final grade. The student who does NOT attend the presentations will be heavily penalized. The student who does NOT attend the Final Presentation will automatically fail.

In case of justified absence (extended health issues) it is required an official declaration from an official entity (official doctor's report or similar).

*FADA has a unique Workshop Week where all faculty courses are suspended in order to create a special informal learning environment which benefits the students. It is compulsory to participate in all Workshop Week activities. Attendance will be taken and it will be counted towards the attendance in all your courses. In all courses, participation in the workshop week will count towards 10% of the total grade.