

# DRAWING AND DESCRIPTIVE GEOMETRY FOR ARCHITECTS II.

## 2022/23. 2. SEMESTER

BASIC DATA			
COURSE NAME	Rajz és ábrázoló II.		Drawing and descriptive geometry for architects II.
COURSE CODE(S)	YARRAA2BNF		
DEPARTMENT	Óbuda University, Ybl Miklós Faculty of Architecture, Institute of Architecture		
PROGRAMME, TRAINING	Architect BSc		full time
COURSE INSTRUCTOR (Instructor managing the course)	Dr. Babály Bernadett PhD, egyetemi adjunktus	babaly.bernadett@ybl.uni-obuda.hu	Consultations: Wednesday: 14:25-15:10, Tuesday 10:45-11:30, department office.
INSTRUCTORS, LECTURERS	Juhász Balázs, óraadó	juhasz.balazs@archirundo.com	Consultations: Tuesday 11:40-12:25, department office.
PRE-REQUIREMENT	Drawing and descriptive geometry for architects I. (YARRAA2BNF)		
HOURS OF LECTURES (WEEKLY)	1 hours		
HOURS OF CLASSROOM TRAINING/ LABORATORY TRAINING (WEEKLY)	5 hours		
FIELD WORK AND TRAINING (WEEKLY)	0 hours		
ASSIGNMENT	Midterm assignment and exam		
CREDITS	7 credits (ECTS)		
AIM OF THE COURSE, BRIEF DESCRIPTION	Building presentation by different kinds of projection systems. Exploring the architectural visualization possibilities of 3D compositions and their projected views with edited and freehand techniques. Architectural vizualization by freehand drawings and digital post production. Presentation of materials and vegetation.		
RECOMMENDED LITERATURE	Bölcskei A., Katona J.: Ábrázoló geometria példákon keresztül, elektronikus jegyzet. ( <a href="http://www.asz.ymmf.hu/geometria">http://www.asz.ymmf.hu/geometria</a> ) Bölcskei A., Katona J.: Ábrázoló geometria példákon keresztül II., elektronikus jegyzet. ( <a href="http://www.asz.ymmf.hu/geometria2">http://www.asz.ymmf.hu/geometria2</a> ) Bancsik Zs., Juhász Imre, Lajos S.: Ábrázoló geometria szemléletesen, elektronikus könyv. ( <a href="http://193.6.8.43/segedlet/dokumentumok/Abrazolo_geometria_szemleletesen.php">http://193.6.8.43/segedlet/dokumentumok/Abrazolo_geometria_szemleletesen.php</a> ) Pethes Endre (1963): 222 ábrázoló geometriai feladat. Műszaki Könyvkiadó, Budapest. Dobó Márton, Molnár Csaba, Peity Attila, Répás Ferenc (1999). <i>Valóság gondolat rajz, Építészeti grafika</i> . Műszaki könyvkiadó. Pixelgrafika építésznek (2020). Terc Kereskedelmi és Szolgáltató KFT, ISBN: 9786155445767.		
REQUIRED TECHNICAL APPLIANCES/ SOFTWARE	Contact: Neptun, E-learning and E-mail. Education materials: According to E-learning		

SCHEDULE OF THE SEMESTER				
WEEK	LECTURE	LECTURER	FORM OF TRAINING	PROGRAM OF TRAINING
1 03.01. (Wednesday)	Introduction of the semester, tasks and requirements. <b>MONGE'S PROJECTION</b> Orthogonal projecting in architectural design	JB	classroom training	Choosing the project building. <b>TASK 01/1:</b> Editing the horizontal and frontal projections of the project building (2 horizontal, 4 frontal drawing)
2 03.08. (Wednesday)	<b>MONGE'S PROJECTION</b> Orthogonal projecting in architectural design; representing depth with shadows	JB	classroom training	<b>TASK 01/2:</b> Editing the shadow casting on the TASK 01/1 drawings (2 horizontal, 4 frontal drawing)
3 03.22. (Wednesday)	<b>AXONOMETRIC PROJECTION</b> Use of axonometric images in architectural representation	JB	classroom training	<b>TASK 02/1:</b> Editing axonometric image from Monge's projections (1 axonometric view)
4 03.29. (Wednesday)	<b>AXONOMETRIC PROJECTION</b> Axonometric diagrams in architectural design and shadow editing	JB	classroom training	<b>TASK 02/2:</b> Editing the shadow casting on the TASK 02/1 drawing (1 axonometric view)
5 04.05. (Wednesday)	<b>PERSPECTIVE PROJECTION</b> 1-2-3 vanishing point projections in architectural representation	JB	classroom training	<b>TASK 03/1:</b> Editing a 2 vanishing point perspective view from Monge projections (1 perspective view)
6 04.12. (Wednesday)	<b>PERSPECTIVE PROJECTION</b> 1-2-3 vanishing point projections in architectural representation	JB	classroom training	<b>TASK 03/2:</b> Editing the shadow casting on the TASK 03/1 drawing (1 perspective view)
7 04.19. (Wednesday)	<b>PERSPECTIVE PROJECTION</b> 4 and 5 vanishing point projections in architectural representation	JB	classroom training	<b>TASK 4:</b> Freehand composition in 4 or 5 vanishing point perspective
8 05.03. (Wednesday)	Consultation: TASK 01 Monge's projections	JB	classroom training	Consultation: TASK 01 Monge's projections
9 05.10. (Wednesday)	Consultation: TASK 02 Axonometric views	JB	classroom training	Consultation: TASK 02 Axonometric views <b>SUBMISSION OF TASK 01</b> (in case of missing drawing or not acceptable quality 12 points will be deducted (30%))
10 05.17. (Wednesday)	Consultation: TASK 03-04 Perspective views	JB	classroom training	Consultation: TASK 03-04 Perspective views <b>SUBMISSION OF TASK 02</b> (in case of missing drawing or not acceptable quality 10 points will be deducted (30%))

11 05.24. (Wednesday)	Submission of the drawings	JB	classroom training	SUBMISSION OF TASK 03-04 (in case of missing drawing or not acceptable quality 10 points will be deducted (30%)) FINAL SUBMISSION OF TASK-01-02
12 05.31. (Wednesday)	Evaluation of the submitted works	JB	classroom training	FINAL SUBMISSION OF TASK 03-04

REQUIREMENTS FOR THE COMPLETION OF THE SEMESTER (Descriptive geometry)		
MID-SEMESTER TASKS AND TESTS		
REQUIREMENTS	DESCRIPTION	VALUE (point, %, grade)
PARTICIPATION AT LESSONS	The practice lessons can be missed up to three times (see § 46 ETVSZ)	-
IN CASE OF ABSENCE FROM LESSONS AND EXAMINATIONS	Absence is considered to be justified with a medical certificate presented.	-
	<p>Students will choose one from the offered buildings that they will work with during the term.</p> <p>The drawing tasks include Monge's projections, the axonometric and perspective system with shadows editing.</p> <p>Tasks will be accepted if the submitted work gets minimum 50 % of the obtainable points.</p> <p>In case of missing drawing or not acceptable quality by the submission deadline, 30 % of the points will be deducted, and the drawing must be corrected or resubmit by the final submission deadline.</p>	-
TASK 01	Editing the horizontal and frontal projections of the project building with shadows (2 horizontal, 4 frontal drawing) size: A3 - horizontal format	40 points
TASK 02	Editing axonometric image from Monge's projections with shadows (1 axonometric view) size: A3 - horizontal format	30 points
TASK 03	Editing a 2 vanishing point perspective view from Monge projections with shadows (1 perspective view) size: A3 - horizontal format	30 points
TASK 04	Freehand composition in 4 or 5 vanishing point perspective.	10 points
TOTAL		110 points

SCHEDULE OF THE SEMESTER (DRAWING: 3 CLASSROOM TRAINING WEEKLY)					
WEEK	E.	E.	FORM OF TRAINING	PROGRAM OF TRAINING	
				TOPIC	TASK
1 03.01. (Wednesday)			classroom training	Introduction of the semester, tasks and requirements.  <b>PLANTS AND VEGETATION I.</b> Simplified or abstract representation of plants and vegetation on site plan and elevation. (freehand drawings)	<b>TASK 01:</b> Simplified representation of vegetation ( <b>6 freehand drawings</b> ): - trees with foliage (1 vertical view, 1 horizontal view) - trees with branches (1 vertical view, 1 horizontal view) - group of vegetation (1 vertical view, 1 horizontal view)
2 03.08. (Wednesday)			classroom training	<b>PLANTS AND VEGETATION II.</b> Simplified or abstract representation of plants and vegetation on site plan and elevation. (digital graphic techniques)	<b>TASK 02:</b> Simplified representation of vegetation ( <b>6 digital picture</b> ): digital post-production of the drawings of TASK 01
3 03.22. (Wednesday)			classroom training	<b>TEXTURE I.</b> Simplified representation of surfaces and materials on site plan and elevation (freehand drawings).	<b>SUBMISSION OF TASK 01 AND 02</b> (in case of missing drawing or not acceptable quality 5 points will be deducted) <b>TASK 03:</b> Simplified representation of materials ( <b>4 freehand drawings</b> ): - 1 glass - 1 wood - 1 brick - 1 optional (metal, stone, roof tile, straw...etc.)
4 03.29. (Wednesday)			classroom training	<b>TEXTURE II.</b> Simplified representation of surfaces and materials on site plan and elevation (digital graphic techniques).	<b>TASK 04:</b> Simplified representation of materials ( <b>4 digital pictures</b> ): digital post-production of the drawings of TASK 03  <b>Final submission deadline of TASK 01-02.</b> <b>In case of missing drawing or not acceptable quality the semester would be denied!</b>
5 04.05. (Wednesday)			classroom training	<b>ELEVATION I.</b> Graphic design techniques of elevation plans (freehand drawings).	<b>SUBMISSION OF TASK 03 AND 04</b> (in case of missing drawing or not acceptable quality 5 points will be deducted)  <b>TASK 05:</b> 1 elevation plan of the chosen building (1 freehand drawing)
6 04.12. (Wednesday)			classroom training	<b>ELEVATION II.</b> Graphic design techniques of elevation plans (digital graphic techniques).	<b>TASK 06:</b> 1 elevation plan of the chosen building (1 digital pictures): digital post-production of the drawing of TASK 05  <b>Final submission deadline of TASK 03-04.</b> <b>In case of missing drawing or not acceptable quality the semester would be denied!</b>
7 04.19. (Wednesday)			classroom training	<b>SITE PLAN I.</b> Graphic design techniques of site plans (freehand drawings).	<b>SUBMISSION OF TASK 05 AND 06</b> (in case of missing drawing or not acceptable quality 5 points will be deducted)  <b>TASK 07:</b> 1 site plan of the chosen building (1 freehand drawing)

8 05.03. (Wednesday)			classroom training	<b>SITE PLAN II.</b> Graphic design techniques of site plans (digital graphic techniques)	<b>TASK 08:</b> 1 site plan of the chosen building (1 digital pictures): digital post-production of the drawing of TASK 07  <b>Final submission deadline of TASK 05-06. In case of missing drawing or not acceptable quality the semester would be denied!</b>
9 05.10. (Wednesday)			classroom training	<b>VISUAL DESIGN I.</b> Complex representation of a building with environment in perspective (freehand drawings)	<b>SUBMISSION OF TASK 07 AND 08</b> (in case of missing drawing or not acceptable quality 5 points will be deducted) <b>TASK 09:</b> Complex representation of a building with environment in perspective (1 hand drawing):
10 05.17. (Wednesday)			classroom training	<b>VISUAL DESIGN II.</b> Complex representation of a building with environment in perspective (digital graphic techniques)	<b>TASK 10:</b> Complex representation of a building with environment in perspective (1 digital picture): digital post-production of the drawing of TASK 09  <b>Final submission deadline of TASK 07-08. In case of missing drawing or not acceptable quality the semester would be denied!</b>
11 05.24. (Wednesday)			classroom training	<b>PORTFOLIO</b> Basics of presentation board and portfolio design. Final submission deadline and correction of TASK 01-10. Editing the presentation board.	<b>SUBMISSION OF TASK 09 AND 10</b> (in case of missing drawing or not acceptable quality 5 points will be deducted) <b>Editing of the presentation board (portfolio) and submission.</b>
12 05.31. (Wednesday)			classroom training	Evaluation of the submitted works	<b>Final submission deadline and correction of the portfolio.</b>

REQUIREMENTS FOR THE COMPLETION OF THE SEMESTER (DRAWING)		
MID-SEMESTER TASKS AND TESTS		
Requirement	DESCRIPTION	VALUE (point, %, grade)
<b>PARTICIPATION AT LESSONS</b>	The practice lessons can be missed up to three times (see § 46 ETVSZ)	-
<b>IN CASE OF ABSENCE FROM LESSONS AND EXAMINATIONS</b>	Absence is considered to be justified with a medical certificate presented.	-
TASK 01	Simplified representation of vegetation ( <b>6 hand drawings</b> ): - trees with foliage (1 vertical view, 1 horizontal view) - trees with branches (1 vertical view, 1 horizontal view) - group of vegetation (1 vertical view, 1 horizontal view) <b>File name:</b> 01_SN_1, 01_SN_2, 01_SN_3, 01_SN_4, 01_SN_5, 01_SN_6	15 points
TASK 02	Simplified representation of vegetation ( <b>6 digital picture</b> ): digital post-production of the drawings of TASK 01 <b>File name:</b> 02_SN_1, 02_SN_2, 02_SN_3, 02_SN_4, 02_SN_5, 02_SN_6	
TASK 03	Simplified representation of materials ( <b>4 hand drawings</b> ): - 1 glass - 1 wood - 1 brick - 1 optional (metal, stone, roof tile, straw...etc.) <b>File name:</b> 03_SA_1, 03_SA_2, 03_SA_3, 03_SA_4,	15 points
TASK 04	Simplified representation of materials ( <b>4 digital pictures</b> ): digital post-production of the drawings of TASK 03 <b>File name:</b> 04_SA_1, 04_SA_2, 04_SA_3, 04_SA_4,	
TASK 05	1 elevation plan of the chosen building ( <b>1 hand drawing</b> ) <b>File name:</b> 05_HO_1	20 points
TASK 06	1 elevation plan of the chosen building ( <b>1 digital pictures</b> ): digital post-production of the drawing of TASK 05 <b>File name:</b> 06_HO_1	
TASK 07	1 site plan of the chosen building ( <b>1 hand drawing</b> ) <b>File name:</b> 07_HE_1	20 point
TASK 08	1 site plan of the chosen building ( <b>1 digital pictures</b> ): digital post-production of the drawing of TASK 07 <b>File name:</b> 08_HE_1	
TASK 09	Complex representation of a building with environment in perspective ( <b>1 hand drawing</b> ) <b>File name:</b> 09_EK_1	20 points
TASK 10	Complex representation of a building with environment in perspective ( <b>1 digital picture</b> ): digital post-production of the drawing of TASK 09 <b>File name:</b> 10_EK_1	
PORTFOLIO	Portfolio must contains TASK 01-10 - 1 board - vertical format - size: 30x100 cm - submission in digital form ( <b>jpg</b> ), and printed (coloured) <b>Fájlnév:</b> 11_PO_1	10 pointss
OPTIONAL TASK	Maximum 10 extra points could be get if the quality or quantity of the final works exceed the requirements. (Max 3 extra points per task)	10 points
Every task should be submitted in digital JPG format (freehand drawings should be scanned and edited) to an online share space discussed in the lessons.		
Pre-exam / exam	-	-
TOTAL		110 point

SEMESTER CLOSING REQUIREMENTS					
CONDITIONS FOR OBTAINING A SIGNATURE	<p><u>Descriptive geometry:</u></p> <ul style="list-style-type: none"> <li>- Three (3) or less absence.</li> <li>- All tasks should be accepted (egyenként minimum 50%-ra) until the final submission deadline.</li> <li>- Student should get minimum 50 points for obtaining a signature.</li> </ul> <p><u>Drawing:</u></p> <ul style="list-style-type: none"> <li>- Three (3) or less absence.</li> <li>- All tasks should be accepted until the final submission deadline.</li> <li>- All portfolio should be accepted until the final submission deadline.</li> <li>- Student should get minimum 50 points for obtaining a signature.</li> </ul> <p><b>If ANY of the requirements are not fulfilled, the semester will be denied!</b></p>				
CONDITIONS FOR SIGNATURE REPLACEMENT	<p><u>Descriptive geometry:</u></p> <ul style="list-style-type: none"> <li>- Three (3) or less absence.</li> <li>- Student should get minimum 40 points.</li> </ul> <p><u>Drawing:</u></p> <ul style="list-style-type: none"> <li>- Three (3) or less absence.</li> <li>- All tasks should be accepted until the final submission deadline.</li> <li>- Student should get minimum 40 points.</li> </ul> <p><b>If ANY of the requirements are not fulfilled, the possibility of signature replacement is not provided!</b></p>				
CONDITIONS FOR OFFERED GRADE  MEGAJÁNLOTT JEGY MEGSZERZÉSÉNEK FELTÉTELEI	<p>To get offered grade both the signature obtaining requirements of descriptive geometry and drawing disciplines must be fulfilled.</p>				
CALCULATION OF THE OFFERED GRADE	Drawing and descriptive geometry scores will be added up to get your overall score.				
	0-99 points	100-139 points	140-159 points	160-179 points	180-200 points
	1- INSUFFICIENT	2 - SUFFICIENT	3 - SATISFACTORY	4 - GOOD	5 - EXCELLENT
REQUIREMENTS FOR EXAM APPLICATION	<p>Those who doesn't accept the offered grade has the possibility to apply the exam. The application should be submitted in the NEPTUN site where the exam dates will be presented in the exam period. The exam is written and contains both disciplines. Application is accepted only for the students obtaining a signature (signature from previous semesters is accepted).</p> <p>Students will take the exam in one of the designated dates in the exam period presented in NEPTUN.</p> <p>The exam lasts 150 minutes per discipline with multiple tasks. Maximum scores are 100 points per discipline.</p>				
CALCULATION OF THE EXAM'S GRADE	<p>The exam will be insufficient if the student didn't get at least 50 points per discipline.</p> <p>The grades of the exam calculated by the method below:</p>				
	0-99 pont	100-139 pont	140-159 pont	160-179 pont	180-200 pont
	1- ELÉGTELEN	2 - ELÉGSÉGES	3 - KÖZEPES	4 - JÓ	5 - JELES