

## Course title: Descriptive geometry

Course Basic Information			
<b>Academic Unit:</b>	Faculty of Civil Engineering		
<b>Course Name:</b>	Descriptive geometry		
<b>Level:</b>	BA		
<b>Course Status:</b>	Mandatory		
<b>Year of Study:</b>	1st Year   2nd Semester		
<b>Number of Hours per Week:</b>	2+2		
<b>ECTS Credits:</b>	3 ECTS		
<b>Time /Venue:</b>	According to timetable		
<b>Course Teacher:</b>	Prof. Asoc. Dr. Arta Basha-Jakupi		
<b>Contact Details:</b>	arta.jakupi@uni-pr.edu		
<b>Course Description:</b>	<p>Technical Descriptive Geometry is a science which enables a much easier and simpler presentation of any three-dimensional body, by providing two-dimensional drawings which offer a much clearer image and accurate drawing. Descriptive Geometry represents that branch of geometry, where the volumetric forms of objects and their geometric relevant laws are studied by means of projections. Bringing together the theory and practice of descriptive geometry with engineering practice is done with the help of graphical presentation methods, at the same time increasing the design and constructive ability among engineers.</p>		
<b>Course Goals:</b>	<p>Basic preparation for professional and technical presentation of three dimensional forms, architectural designs as well as development of capabilities to understand three dimensional space and the spatial thinking in context of articulating elementary concepts in the profession of architecture.</p>		
<b>Expected Learning Outcomes:</b>	<p>The course belongs in the group of preparatory subjects and enables gaining of basic knowledge for further studies in the subject of architecture and spatial planning.</p>		
Student Workload (should be in compliance with student's Learning Outcomes)			
Activity	Hours	Day/ Week	Total
Lectures	2	15	30
Theory/ Lab Work	2	15	30
Practical Work	1	2	2
Contact Hours with Teacher /Consultations during Office Hours	0.5	6	3
Field Work			
Colloquium, Seminars	1.5	2	3

Homework	0.5	6	3
Self-study Time (in the Library or at Home)			
Final Exam Preparation			4
Evaluations (Tests, Quiz, Final exam)			
Projects, Presentations, etc.			
<b>Total</b>			<b>75</b>

<b>Teaching Methods:</b>	<i>Lectures + Exercises</i>
<b>Assessment Methods:</b>	Evaluation of home assignment and models 10 % First Assessment 45% Second Assessment 45% If students fails on any of two first evaluations he needs to take the Final Exam 90%

<b>Primary Literature:</b>	1. Flamur DOLI, Gjeometria Deskriptive, Prishtinë, 1990
<b>Additional Literature:</b>	1. An Elementary Course in Descriptive Geometry, Solomon Wolf, 2007 2. B. QURÇIQ, Vizatim teknik me Gjeometri deskriptive, Prishtinë 1983, All other relevant literature on the taught subject.

**Course Plan:**

<b>Week</b>	<b>Title of the Lecture</b>
<b>Week 1:</b>	Introduction. Projections methods. Projection of point in a plane. Projection of point in two planes - quadrant. The projection of the point in the respective quadrants
<b>Week 2:</b>	Projection of Point in Three Planes-Octants, The projection of the Point in the respective Octant.
<b>Week 3:</b>	Line - Projections of Line
<b>Week 4:</b>	Projections of Line in Arbitrary and Special Positions.
<b>Week 5:</b>	Line Intersection with the Projection Planes, Line Imprint in Projection Plane
<b>Week 6:</b>	Projections of the plane with arbitrary position. Projections of the plane with special position.
<b>Week 7:</b>	Projections of the plane in which lays a line and one point. Projections of the plane given with line in particular position. The parallels the plane. Horizontal plane. Frontal plane. Side Plane.
<b>Week 8:</b>	Projections of plane given by the Triangle. The use of first and second parallel.
<b>Week 9:</b>	Projections of the plane given with the intersection of two lines. Projections of plane given with two parallel lines.
<b>Week 10:</b>	Projection of two intersected planes. Intersection of the line with arbitrary plane.
<b>Week 11:</b>	Transformation – changing of the projection planes.

	Transformation of the point. Transformation of the line. Transformation of the triangle.
<b>Week 12:</b>	Rotation. The rotation of the point. The rotation of geometric shape. Determining the true dimension of the line, and the angles created from the line with projection planes.
<b>Week 13:</b>	Method of falling-fitting of the arbitrary and projection plane.
<b>Week 14:</b>	Intersection of polyedric bodies. Intersection of the pyramid with the projection plane.
<b>Week 15:</b>	Intersection of the pyramid with arbitrary plane. Drafting the envelope of the pyramid

### Designed teaching plan

Regular attendance of lectures and exercises  
 Mobile phones need to be switched off during class.  
 Attending the class in time and concerted work on assignments are required