

## Course title: Descriptive Geometry 2

Course Basic Information	
Academic Unit:	Faculty of Civil Engineering
Course title:	Descriptive Geometry 2
Level:	Bachelor
Course Status:	Elective
Year of Study:	1 <sup>st</sup> Year   2 <sup>nd</sup> Semester
Number of Classes per Week:	2+1
ECTS Credits:	3 ECTS
Time /Location:	According to the announced timetable
Teacher:	Prof.asoc.Dr. Arta Basha-Jakupi
Contact Details:	Email: <a href="mailto:arta.jakupi@uni-pr.edu">arta.jakupi@uni-pr.edu</a> <a href="http://www.fn.uni-pr.edu">www.fn.uni-pr.edu</a>
Course Description:	
Course Description:	Design methods. Interference of polyhedric bodies, Geometric design of regular geometric roofs, Design of irregular geometric roofs with restrictions,
Course Goals:	
Course Goals:	Basic preparation for professional and technical presentation of architectural projects as well as development of skills for understanding three-dimensional space and spatial thinking. Basic preparation for the professional and technical presentation of three-dimensional forms, namely construction and architectural projects, development of skills for understanding three-dimensional space and spatial thinking in the context of articulating the basic notions in the construction profession. The course is part of the group of preparatory courses and enables the acquisition of basic knowledge for further study in the field of Construction and Spatial Problems.
Expected Learning Outcomes:	
Expected Learning Outcomes:	<p>-To provide students with the basic content of descriptive geometry and its application in order to enable them to translate the geometric patterns of the three dimensions of architecture into normatively correct representations.</p> <p>- be able to make a two-way connection between reality and its measurable graphical model. This knowledge is essential to understanding space and its representation in two dimensional support. The student will also possess the basic knowledge to master all drawing tools.</p> <p>- the application of the various methods of representation made by the study of descriptive geometry and the practice of manual mapping will allow the learner to develop their own graphic language and expression in the specific field of architecture.</p> <p>- developing skills for understanding two-dimensional and three-dimensional space and spatial thinking.</p>
Student Workload (should be in compliance with student's Learnign Outcomes)	

Activity	Hours	Day/ Week	Total
Lectures	2	14	28
Theory/ Lab Work/Exercises	2	14	28
Practical Work			
Consultations with the teacher	0.3	10	3
Field Work			
Test, seminar paper			
Homework	1	14	14
Self-study (library or home)			
Preparation for final exam	1	2	2
Assessment time (test, quiz, final exam)			
Projects, presentations, etc.			
<b>Total</b>			<b>75</b>

**Teaching Methods:**

The method of learning the subject of Descriptive Geometry 2 consists of giving lectures and holding exercises for special weekly teaching units, then working on graphs and models - models for certain teaching units.

**Assessment Methods:**

First assessment; Second assessment; Assessment of exercises; Assessment of models; Regular follow-up; Final exam; Total (average percentage) 100%.

**Primary Literature:**

Lecture prepared by Prof.asoc.dr.Arta Basha-Jakupi  
Flamur DOLI, Gjeometria Deskriptive, Prishtinë,

**Additional Literature:**

Pottmann, H, Andreas A.,(2007) et al. Architectural Geometry. Bentley Institute Press.  
G.R. Bertoline, E.W. Wiebe, C.L. Miller, L.O. Nasman, (1995) Engineering Graphics Communication. R.D. Irwin Inc., Chicago, Chapter 11, pp. 597–695.  
The Projective Cast: Architecture and Its Three Geometries. MIT Press, 2000

**Designed teaching plan**

Week	Title of the Lecture
<b>Week 1:</b>	Introduction
<b>Week 2:</b>	Rotary body intersection. Flat cone cutout.
<b>Week 3:</b>	Intersection of polyhedric troops.
<b>Week 4:</b>	Pyramid intersection with prism.
<b>Week 5:</b>	Prism intersection with prism.
<b>Week 6:</b>	Pyramid intersection with pyramid.
<b>Week 7:</b>	Rotary body intersections. Sloping cone intersection with line.
<b>Week 8:</b>	Sloping cylinder intersection with line.
<b>Week 9:</b>	Sphere intersection with vertical prism.
<b>Week 10:</b>	Intersection of regular vertical cylinder with horizontal prism in steep projection.
<b>Week 11:</b>	Geometric Roof Solution
<b>Week 12:</b>	Geometric solution of multi-aquatic roofs.
<b>Week 13:</b>	Geometric solution of composite roofs - with barriers
<b>Week 14:</b>	Geometric solution of composite roofs
<b>Week 15:</b>	Preparation for the exam.

**Academic Policies and Code of Conduct**

*We start and finish class on time.*

*Tools used during class must be cleaned and stored away at the end of class.*

*Mobile/smart phones, and other electronic devices (e.g. iPods) must be turned off (or on vibrate) and hidden from view during class time.*

*Laptop and tablet computers are allowed for quiet use only; other activities such as checking personal e-mail or browsing the Internet are prohibited.*

**Note | If a student has more than 3 class assignments evaluated below 50% he/she loses the right on taking the final exam. Evaluation is done from 0-100 %.**