

## Course Syllabus

Academic year: 2018-2019

Institution	University of Petroșani
Faculty	Mechanical and Electrical Engineering
Field of study	Industrial engineering
Level	Bachelor
Program of study	Machine Building Technology

Course	<b>Descriptive geometry</b>
Code	2BB2OF04
Year of study (semester)	I (I)
Number of hours	42
Number of credits	3
Professor	Lecturer eng,Ph.D. ZOLLER Iosif Liviu

No.	Topic
1.	Fundamental problems of the point: reference systems with two and three projection planes; the purge of points in the dials and the reference spikes; particular positions of points; point symmetry.
2.	Fundamental problems of the right: determination and representation of the right; the traces of the straight line, the division of the right into the regions, the intersection of the straight with the bisecting planes; particular positions of the straight line; relative positions of two straight lines (parallel, straight, straight, disjoint), right angle theorem, visibility in the purge.
3.	Fundamental Problems of the Plan: Determining and Representing the Plan; straight and dots located on planes in space; the construction of the traces of the plane with the help of two competing ribs, two parallel lines, one straight and one outer point, three noncolar points; particular straight lines of the plane (straight, straight, straight, straight); drop lines and their properties; particular positions of the planes; relative positions of two planes (parallel planes, competing planes); intersections of planes.

4.	The right and the plane in space: relative positions of the straight to a plane in space (straight parallel to a plane in space, rivals competing with a plane in space, straight perpendicular to a plane in space).
5.	Methods of descriptive geometry: method of changing projection planes, rotation method, rebate method and increase of rebate.
6.	Poliedre: polyhedral representation, visibility criteria; flat plane by polyhedra; the intersection of straight polyhedrons; the development of polyhedra; intersections of polyhedra.