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**FREE UNIVERSITY PEREIRA SECTION**

**UNDERGRADUATE PROGRAM IN ENVIRONMENTAL ENGINEERING**



**SUBJECT: DESCRIPTIVE GEOMETRY**

**CODE: -----**

**SEMESTER: THIRD**

**HOURS WEEKLY: 4**

**THEORETICAL: 2**

**PRACTICES: 2**

**REQUIREMENTS: DRAWING OF PROJECTIONS.**

**AIM :**

To train the student in the basic principles and tools offered by Geometry

Descriptive as a fundamental basis for the expression of designs and solutions  
engineering.

**METHODOLOGY:**

In addition to the teacher's masterful presentations and explanations, the subject matter must  
contain a large practical part, so that the student acquires skill and good





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mastery of the tools provided by this subject. The practical work must have special importance in the evaluation of this subject.

#### CONTENT :



1. Orthogonal drawings
2. Fundamental views - point, line and plane
3. Crossed lines
4. Penetration points and intersection of planes.
5. Perpendicularity: lines and planes
6. Dihedral angle and angle between a line and a plane
7. Revolution
8. Intersection and development
9. Mining and topography problems
10. Vertical geometry.



#### BIBLIOGRAPHY:

HAWK C. Descriptive Geometry. ISBN: 968-422-919-4 Ed. McGraw Hill 1991

FRENCH & VIERCK. Engineering Drawing ISBN: 968-604-664-X, McGraw Hill, 1981





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JENSEN. Engineering Drawing and Design. ISBN: 968-604-677-1, McGraw Hill 1973.

