



UNIVERSIDAD LIBRE®

Personería Jurídica No. 192 de 1946 de Mingobierno
Nit.: 860.013.798-5



FREE UNIVERSITY PEREIRA SECTION

UNDERGRADUATE PROGRAM IN ENVIRONMENTAL ENGINEERING



SUBJECT: HYDROLOGY

CODE: -----

SEMESTER: EIGHTH

HOURS WEEKLY: 4

THEORETICAL: 4

PRACTICES: 0

REQUIREMENTS: HYDRAULICS II

GOALS.

To ensure that the student acquires the necessary knowledge to analyze and apply the hydrological methods in environmental impact assessment.

METHODOLOGY.

The course will be developed with master lectures by the professor on the content basics of the subject; for their part, students will strengthen their knowledge of the subject





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through recommended readings, consultations with the teacher and problem solving

of application.



WORK PROGRAM.

- Basic concepts: The hydrological cycle, systems concept, system model hydrological, classification of hydrological models, development of hydrology.
- Hydrological processes
- Atmospheric water
- Subsurface water
- Surface water
- Hydrological measurements
- Unit hydrograph
- Summary of basin characteristics
- Aggregate flood transit
- Distributed flood traffic
- Dynamic wave transit
- Hydrological statistics
- Frequency analysis
- Hydrological design
- Design storms





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- Design crescents



LITERATURE.

LINSLEY-KOHLER, PAULUS, Hydrology for Engineers

VEN TE CHOW, Applied Hydrology. McGraw Hill

APARICIO M. FRANCISCO J., Fundamentals of Surface Hydrology. Limusa Publishing House

CASTAÑEDA O. ALONSO Surface Hydrology, University of Tolima, Engineering

Forestry, Ibagué, 1986

