



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: CONSTRUCTION MANAGEMENT

CODE: -----

SEMESTER: FIFTH

HOURS WEEKLY: 4

THEORETICAL: 2

PRACTICES: 2

REQUIREMENTS: TOPOGRAPHY AND PRACTICES

GOALS.

That the student is able to interpret plans and maps, carry out an analysis of cost, prepare a budget, plan and direct a project.

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 professor and through visits to the works of interest in the city. On the other hand, the student will develop during the course of the semester a PROJECT that includes the topics learned and will present a final report about it.



WORK PROGRAM.

1. CARTOGRAPHY, PLANS, SCALES

2. CONSTRUCTION ELEMENTS

- Materials: cement, clay, brick, pipes, sand, crushed stone, wood, iron, wire, nails
- Machinery, tools, equipment
- Labor
- Manufacturing of units: Concrete, mortar, walls
- Concrete, walls, resistances
- Steel reinforcement: Its function is to resist tensile stresses; length of development; folding, shaping, overlapping; assembly
- Prismatic elements: Beams and columns





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3. EXECUTION OF WORKS. QUANTITIES OF WORK

- Stripping, leveling
- Leveling and staking out
- Excavation, levels, embankments
- Drains
- foundations
- Beams, columns, formwork
- Walls, plaster, stucco, paint
- Subfloors and floors
- Covers
- Hydraulic and sanitary installations

4. CONSTRUCTION BUDGET



- Quotes: List of materials, machinery and equipment prices, labor quote of work
- Construction indices
- Preparation of the budget by unit prices

5. PLANNING, PROGRAMMING AND CONTROL OF WORKS





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6. PRESENTATION OF A PROPOSAL

LITERATURE.

ORTEGA G. JOSÉ, Sanitary Installations in Homes, CEAC editions, Peru, 1985

NORIEGA JORGE, Planning, Programming and Control of Works, Institute of Organization and Methods, 1986

