



Universidad
Tecnológica
de Pereira



ITyLAB

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CITYLAB MODULE General Information

Lima Workshop 5-6-7 October 2016

Universidad Tecnológica de Pereira

Territorio, Agua y Sustentabilidad (Water, Territory and Sustainability)

Environmental Science and Mechanical Engineering Faculties.

- Environmental Management, Undergraduate, Six compulsory Courses (between the 6th and the 9th semesters); From first semester 2016 to first semester 2018; 40 students.
- Mechanical Engineering, Undergraduate, An elective course (between the 7th and the 10th semesters); First semester 2017; 15 students.
- Environmental Management, Short Course; Second semester 2017; 15 participants from local communities and institutions.

SDG goal: 11.a Support positive economic, social and environmental LINKS BETWEEN URBAN, PERI-URBAN AND RURAL AREAS by strengthening national and regional development planning.

Short description: The module aims to provide students with the conceptual and methodological basis for analysis and planning of alternative solutions to environmental problems and conflicts articulated to water management in a specific territory. The module consists of 4 main topics: 1. Methodological foundation for understanding problems / issues and environmental conflicts; 2. Analysis of the sustainability of rural-urban territory from the water accessibility point of view; 3. Analysis of historical and cultural processes that affect environmental problems and conflicts associated with water, and, 4. Analysis of sustainable water management.



Local stakeholders

WHO? Community Association of aqueducts of Dosquebradas, Risaralda, Colombia., Building permits office, Municipality of Dosquebradas. Environmental Protection Authority –CARDER–.

HOW? Bringing information, answering questions, showing the study area and taking active part of the module.

WHEN? They will join all phases of the process along the four semesters when the module takes place.

Students: “Todos somos un colectivo de aprendizaje”.

Role of the students. Through a dynamic and active participation, and interaction with stakeholders and teachers, to analyze and understand the issues / conflicts associated with the territory, its relationship with water and to visualize alternatives for sustainability.

Task. Reading of papers and reports, literature review, workshops participation, Interviews, seminars and written reports.

Groups. Students will work in groups conformed by 4 people each one.

Supported in their task. Students will be guided by teachers in formal classes, conceptual and methodological advice and support through the field.

Teachers

Role. Support, train, invite to think, oversee learning, involve, manage group dynamics, keep the process moving, facilitate and potentiate communication between local actors, teachers and students, prepare topics and workshops for the development of the module .

Materiales. Referenced papers, books and reports from Environmental Authority, Municipality and University, audiovisuals tools, ArcMap 10.1, QGIS, Google Earth and Atlas-ti

Integration and interdisciplinarity

How the module will be integrated in the existing curriculum. At the Environmental Management Programme, the module will be integrated in six existing courses along four semesters. At the Mechanical Engineering the module will be offer as an elective course.

Multidisciplinary character of the module. The module will be offer to students from Environmental Science and Mechanical Engineering Faculties. It will oriented and supported by eight (8) Teachers from different disciplines: Sanitary Engineering, Architecture, Geology, Sociology, Antropology, Archeology, History and Mechanical Engineering.

Evaluation

Written reports, photographic memories, audiovisual material, seminars and virtual reports.

Barriers and success factors

The barriers and success factors. Student autonomy; changing role of teachers; Interaction with local actors; institutionalization of the educational proposal; expectations of local actors beyond the scope of the pedagogical approach.

Recommendations: Agreements. Educational benefits for local actors. Advice and coordination in training students.